Atlas of Physical Signs

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Preface

- The aim of this atlas is to help the medical students in the detection and interpretation of the physical signs of various medical diseases.
- I have no authority for any of these slides but I had collected them from different websites and added my notes.

(cont.)

Preface

- The title of the slide has been hidden for self assessment. To reveal the title click on the slide.

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2009
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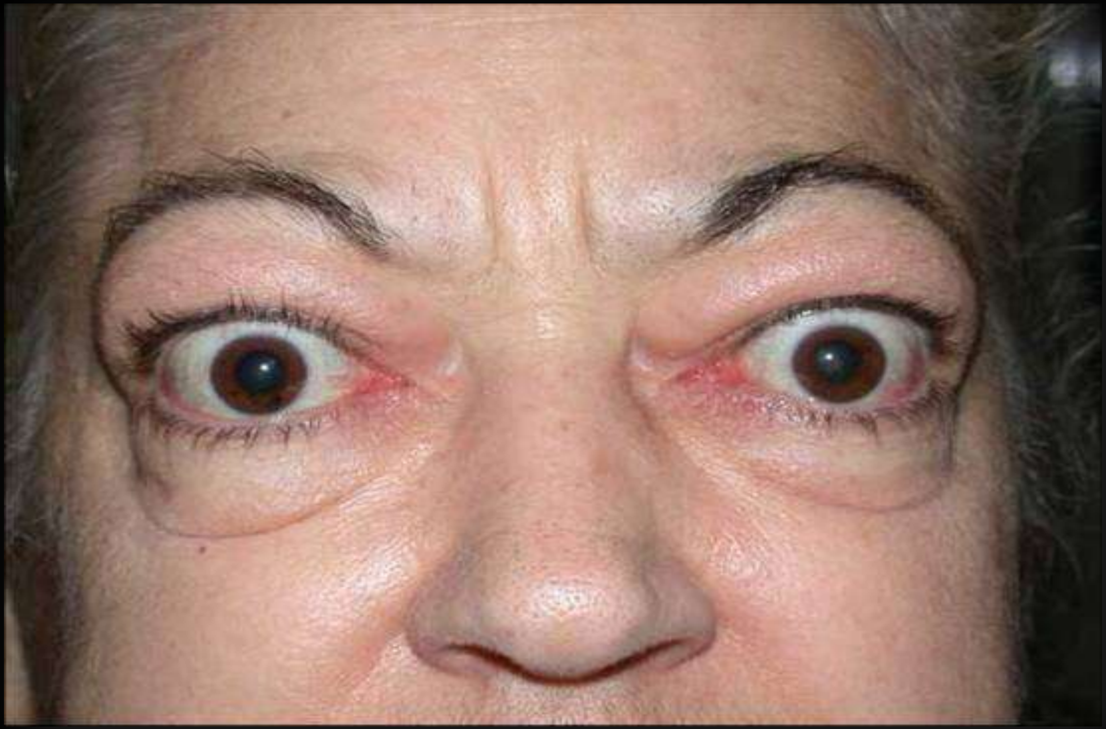
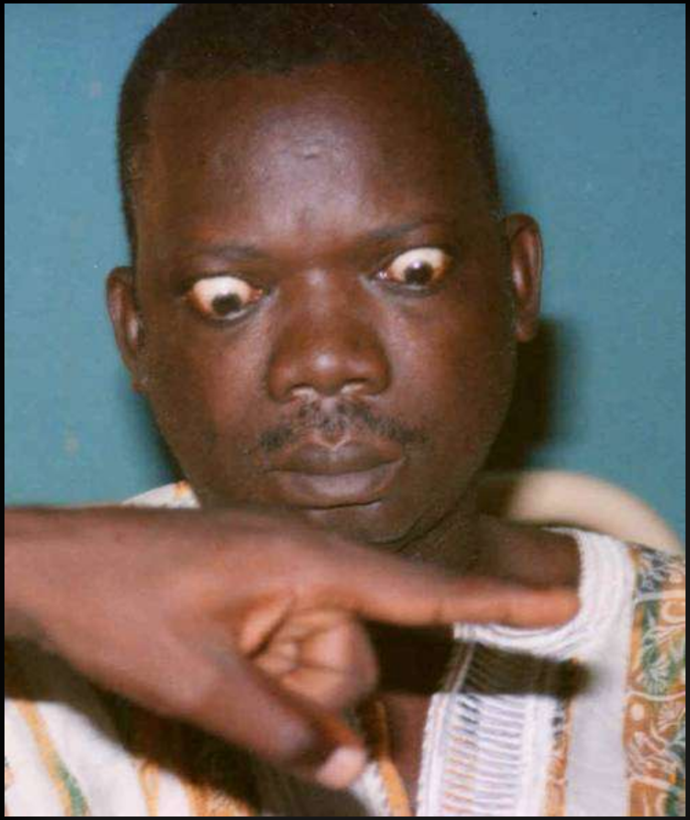
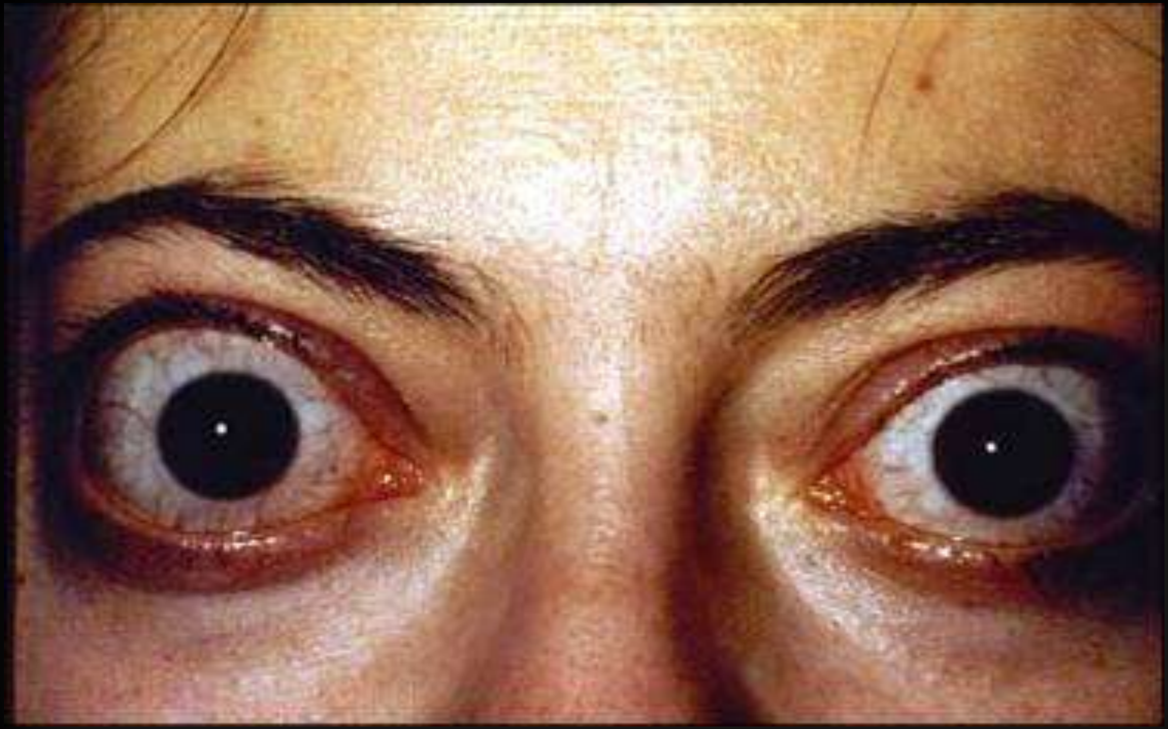
Lid retraction
[Thyrotoxicosis]



Lid lag
[Thyrotoxicosis]

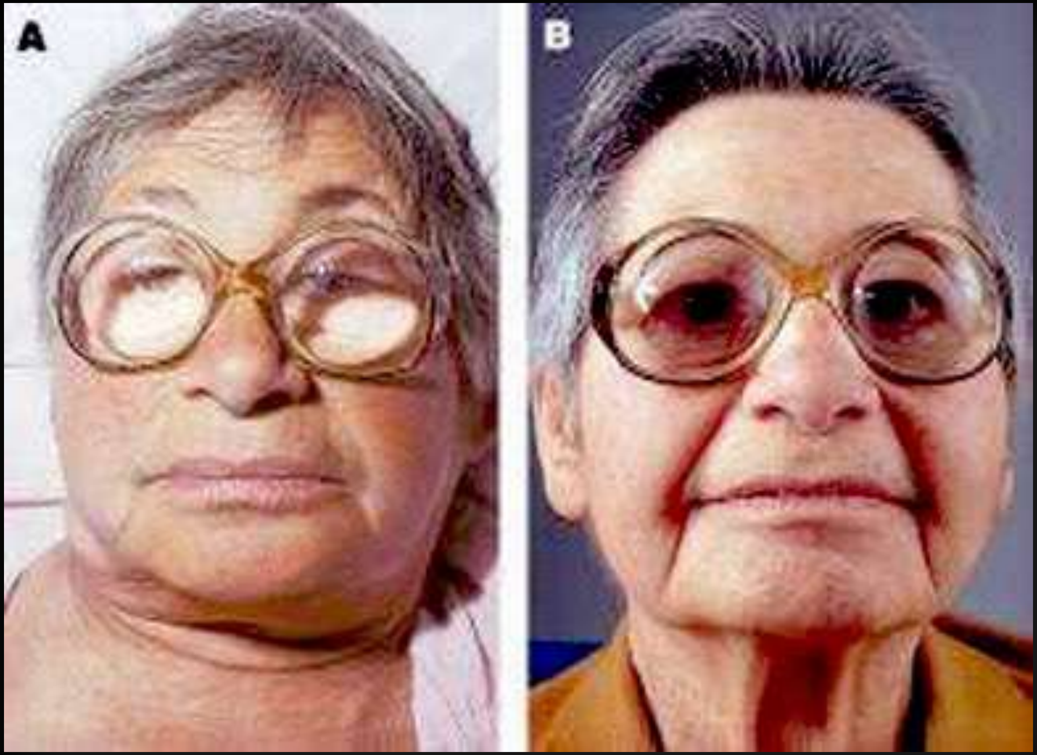


Exophthalmos
[Grave’s disease]

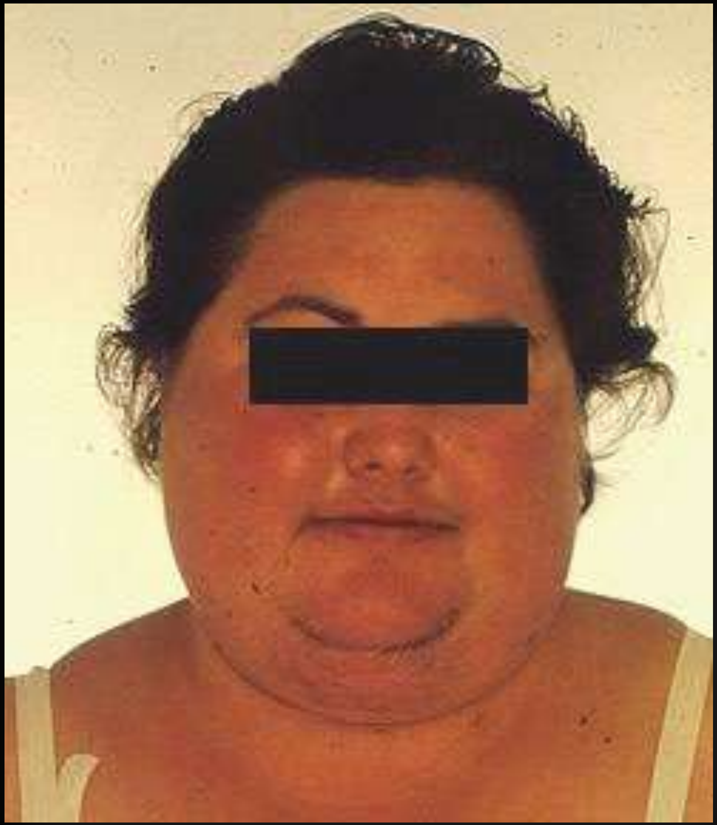


Puffy apathetic face with coarse hair

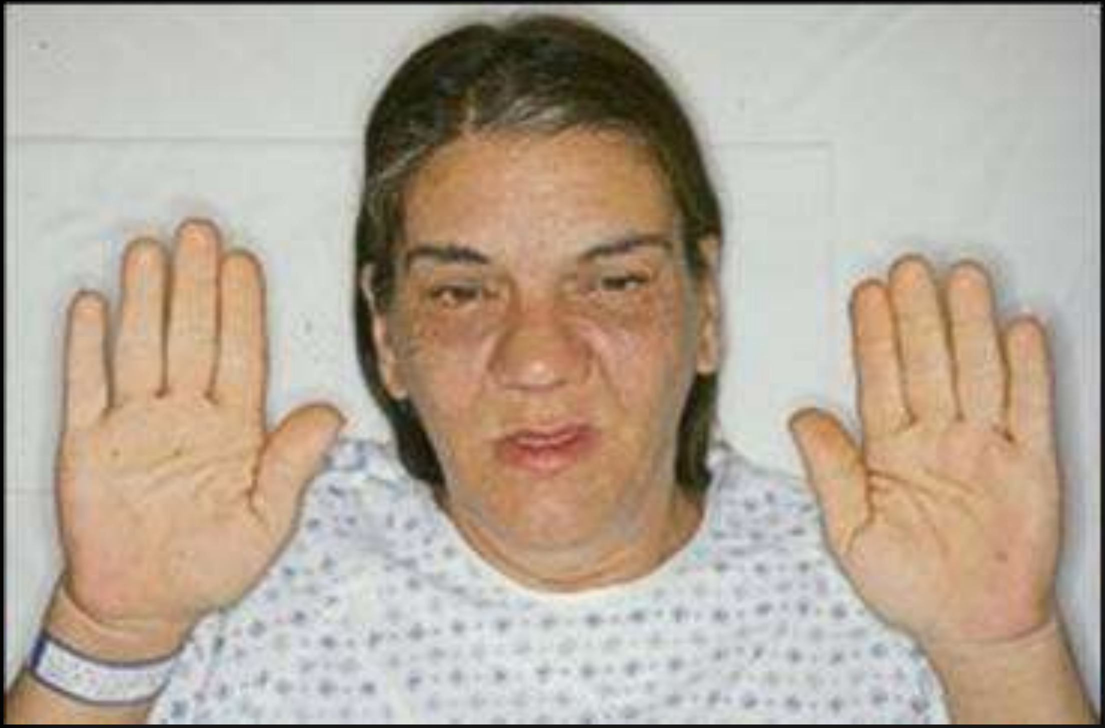
[Hypothyroidism, before and after treatment]



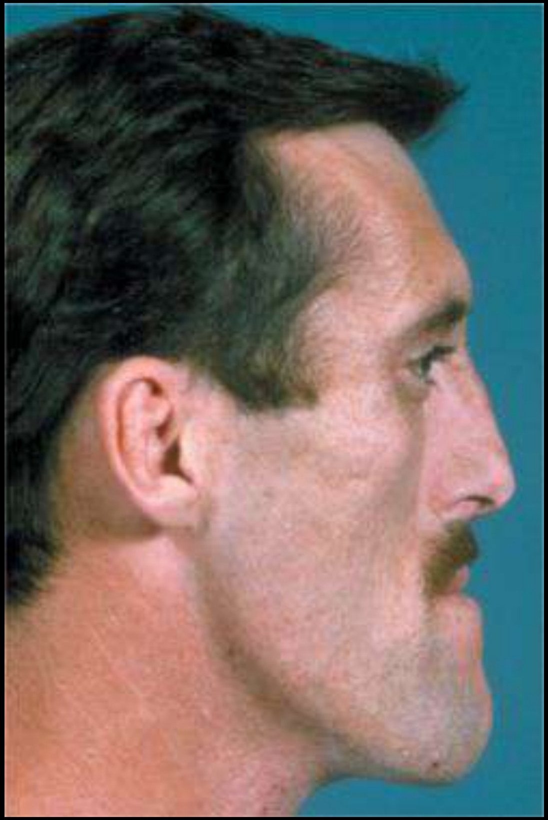
Moon face with hirsutism [Cushing syndrome]



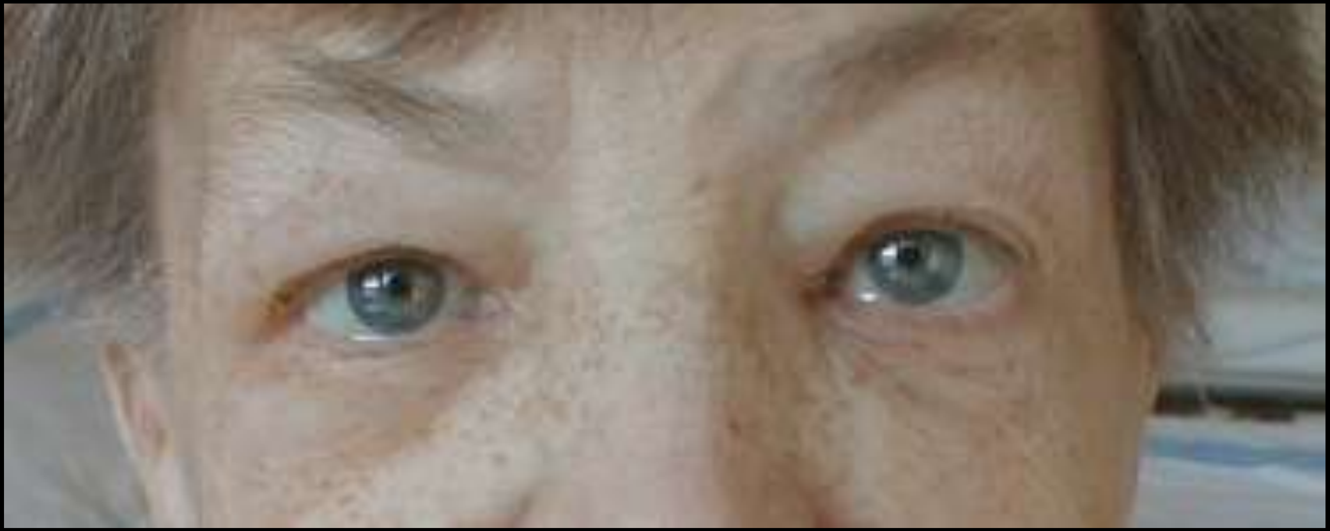
Coarse features of the face and bulky hands [Acromegaly]



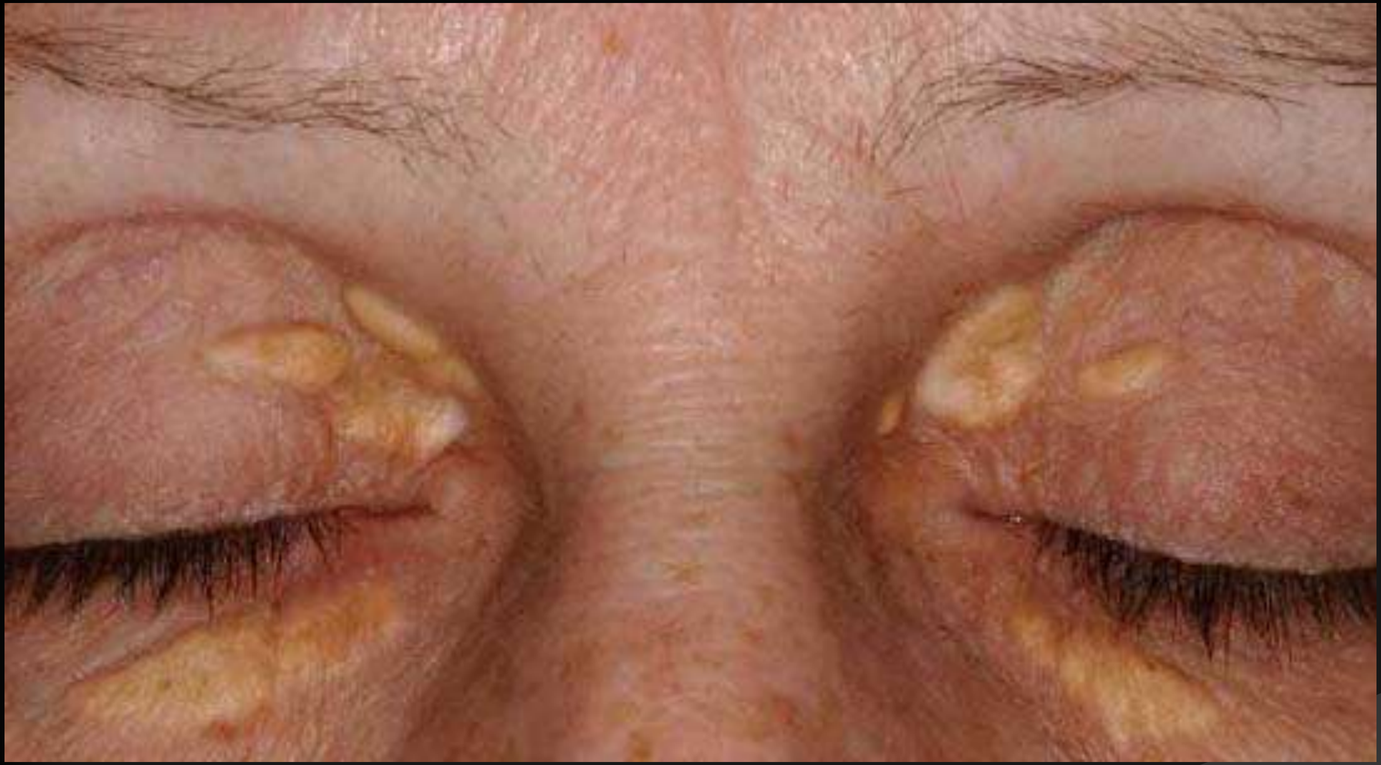
Prognathism (protrusion of lower jaw)
[Acromegaly]



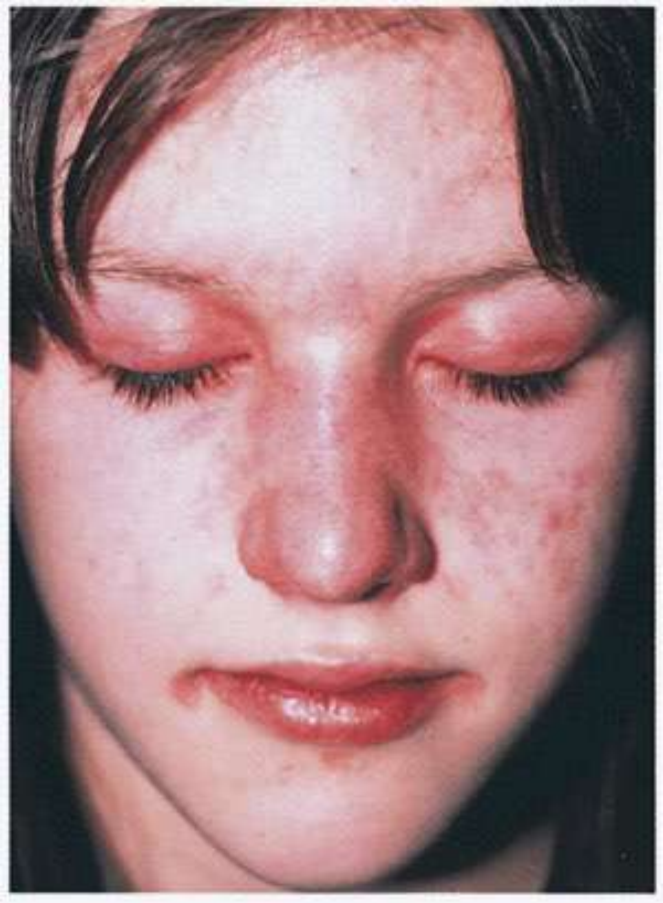
Puffy eyes
[nephrotic syndrome, hypothyroidism]



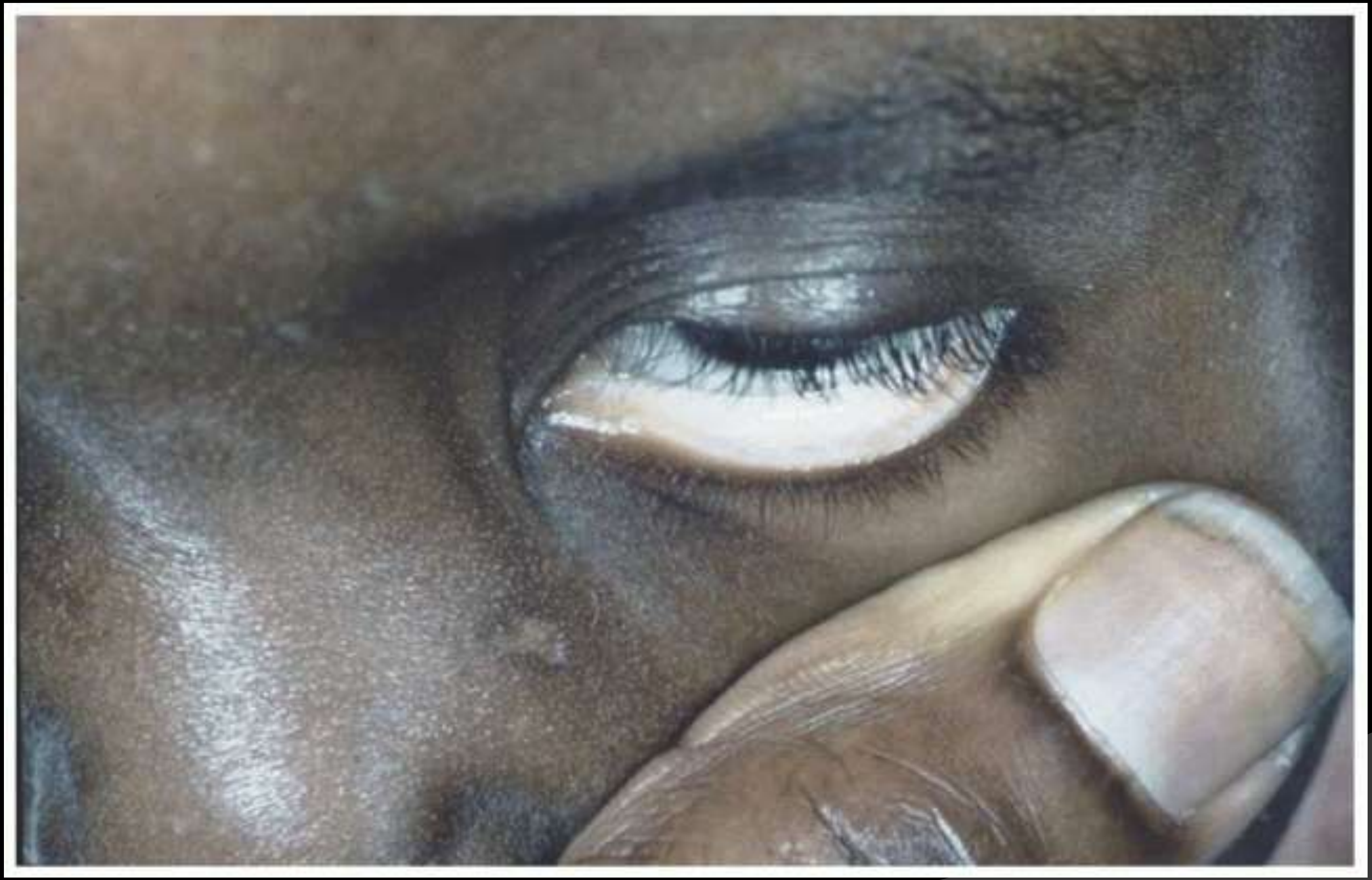
Xanthelasma [hypercholesterolemia]



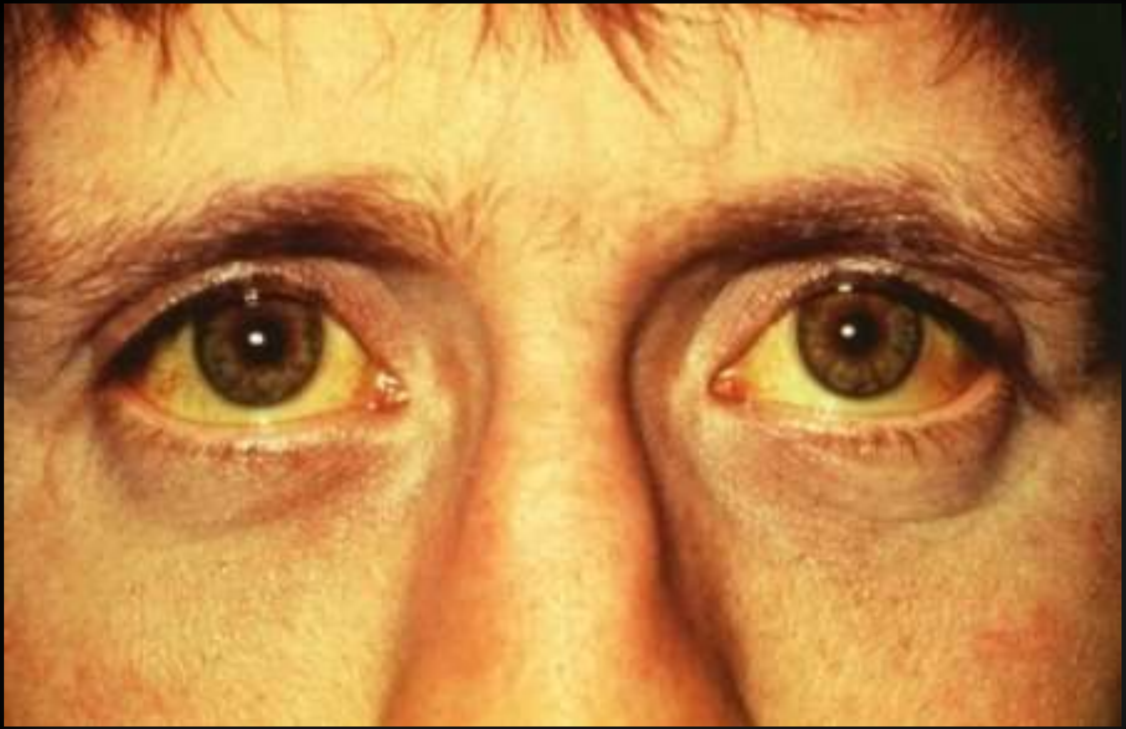
Heliotrope rash
(purple discoloration on the upper eyelids)
[dermatomyositis]



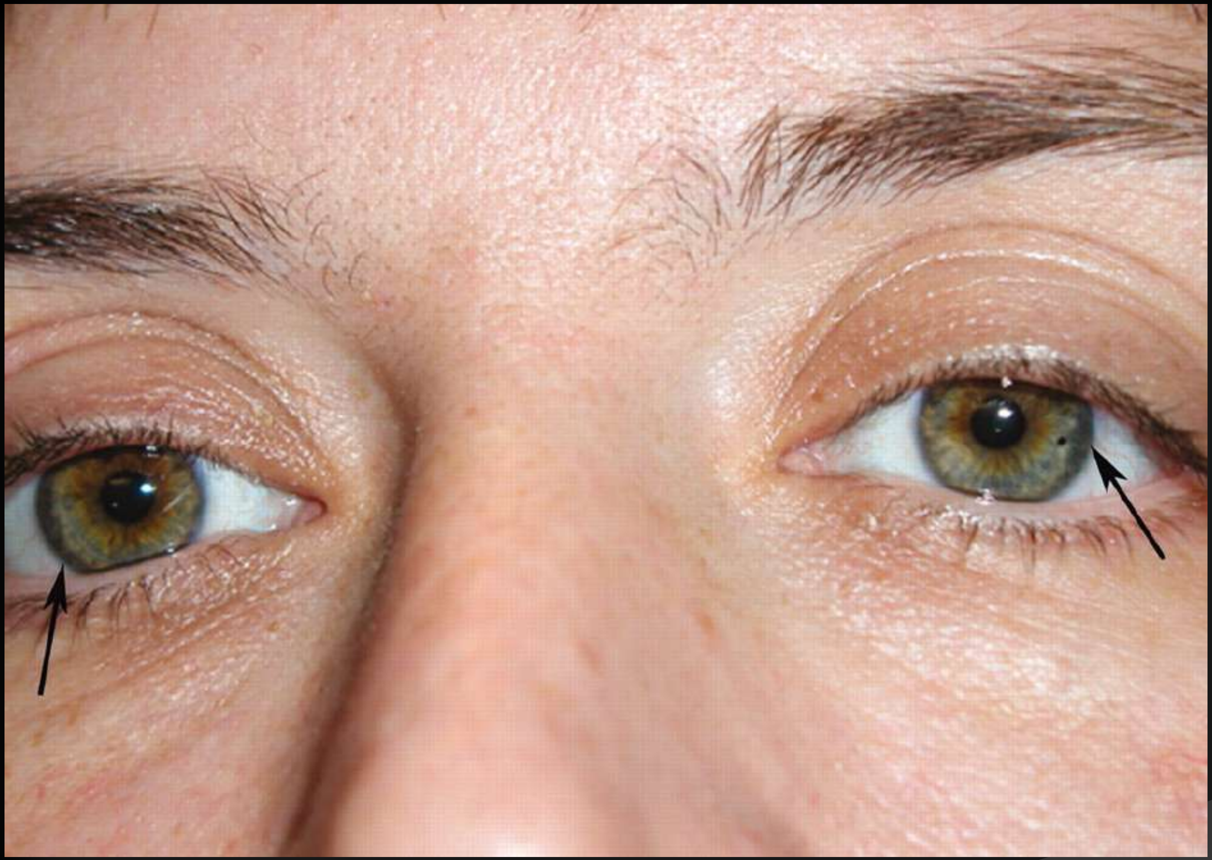
Pallor of conjunctiva [anemia]



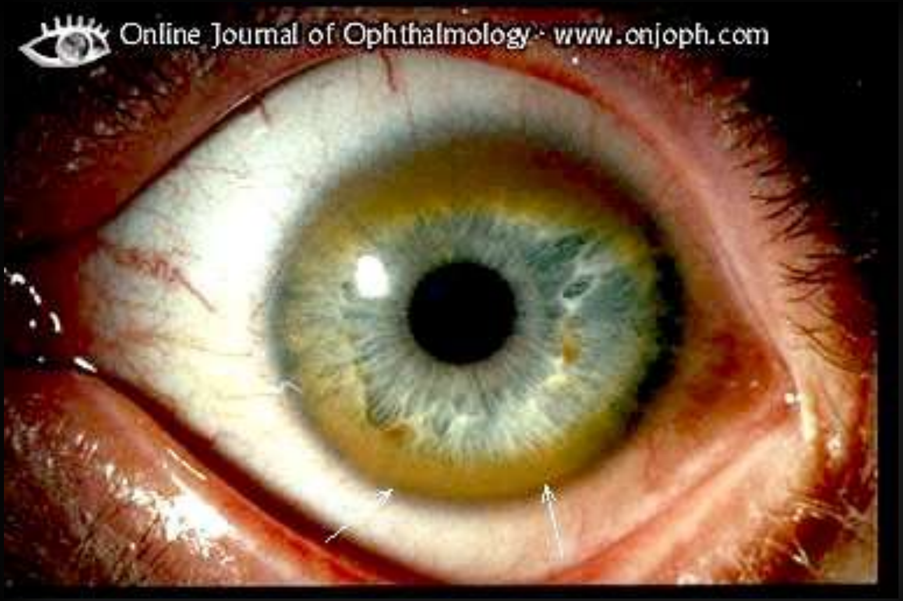
Yellowish discoloration of the sclera and skin [jaundice]



Kayser fleischer ring
[Wilson's disease]

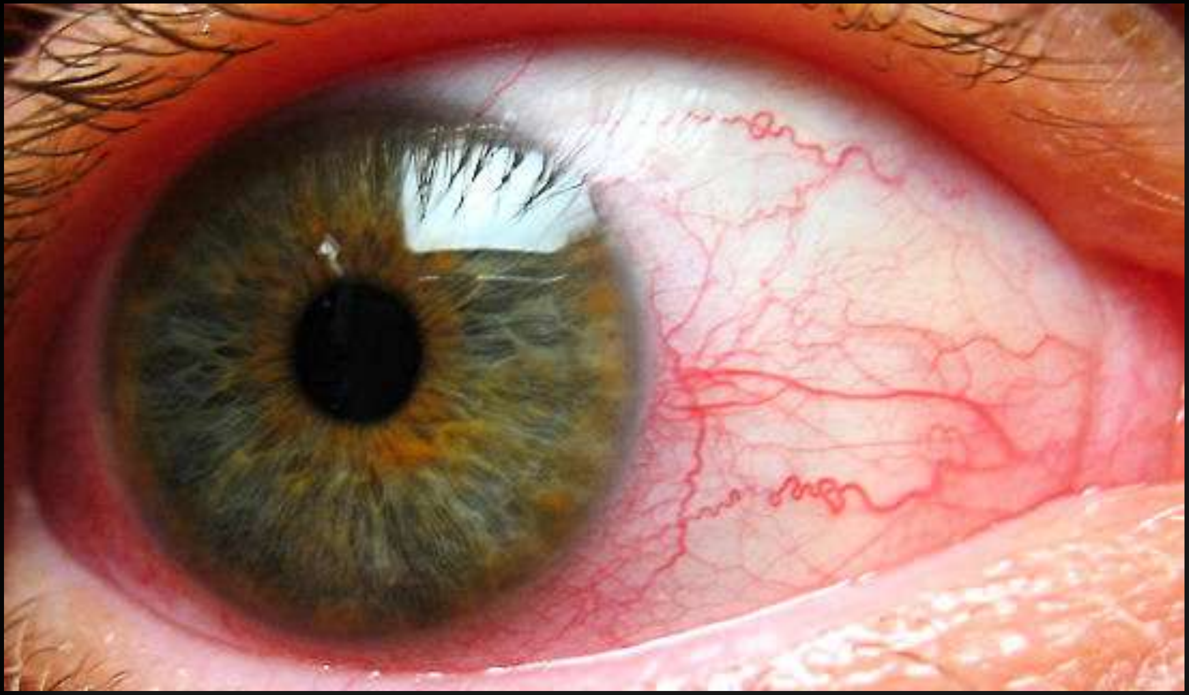


Kayser fleischer ring
[Wilson's disease]

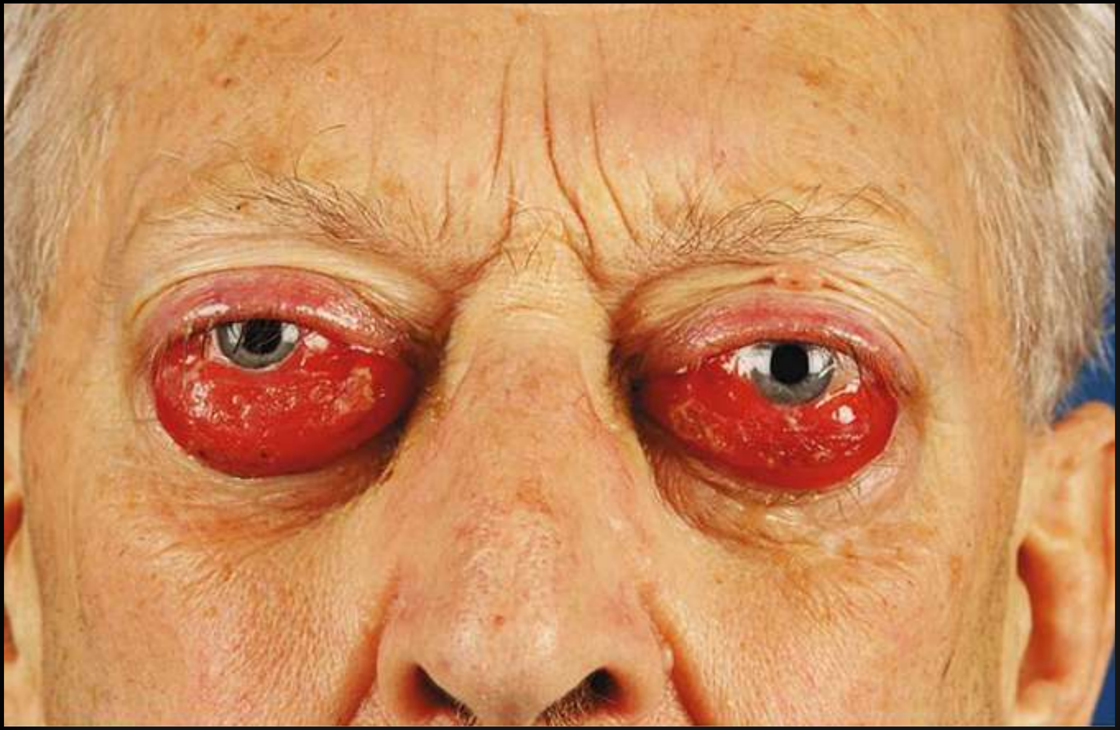


Red painful eye (anterior uveitis)

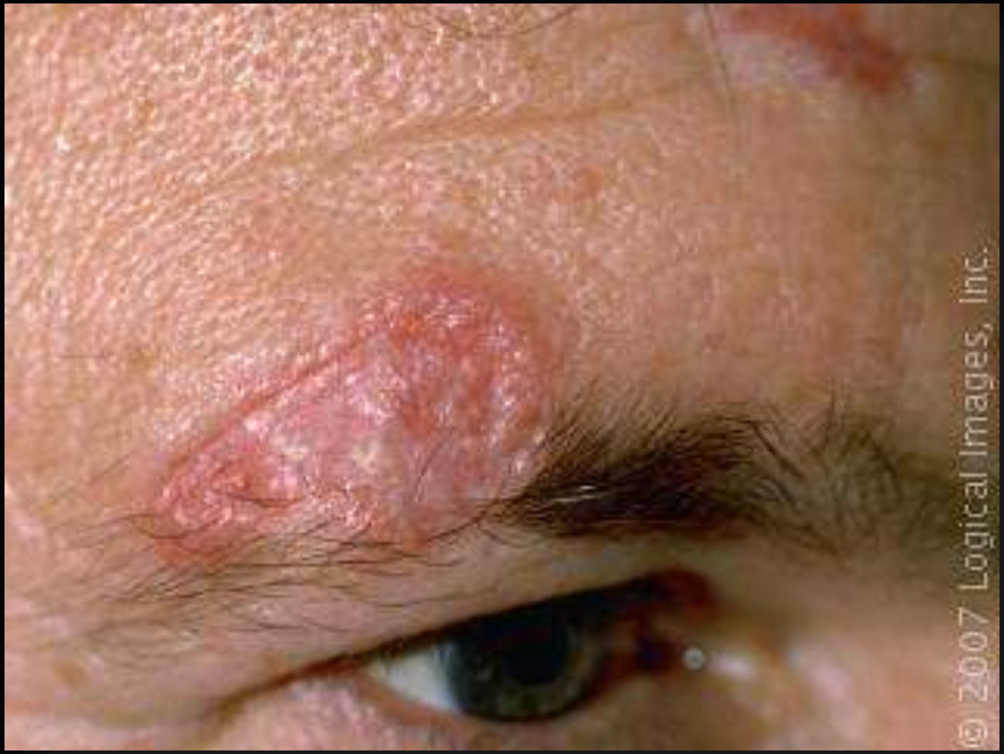
[Behçet's disease, Reiter's syndrome, IBD]



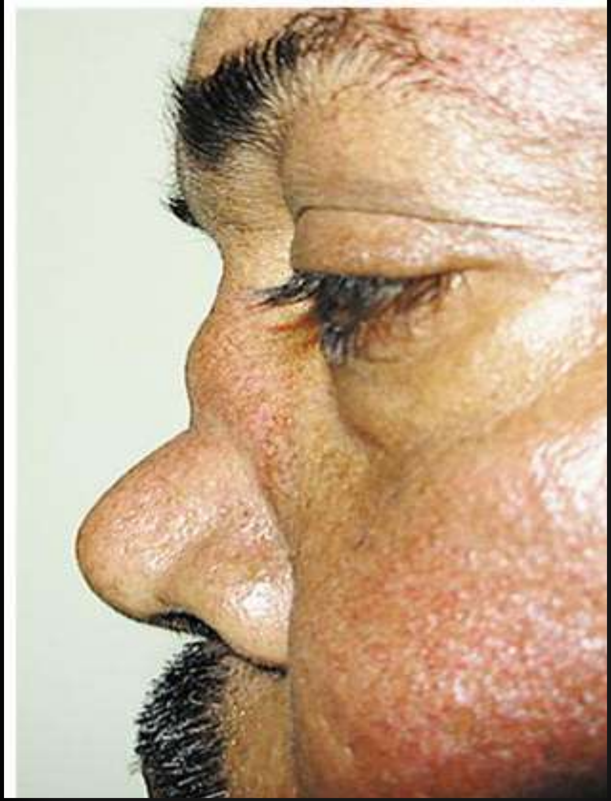
Infiltration of lower eye lid
[Lymphoma]



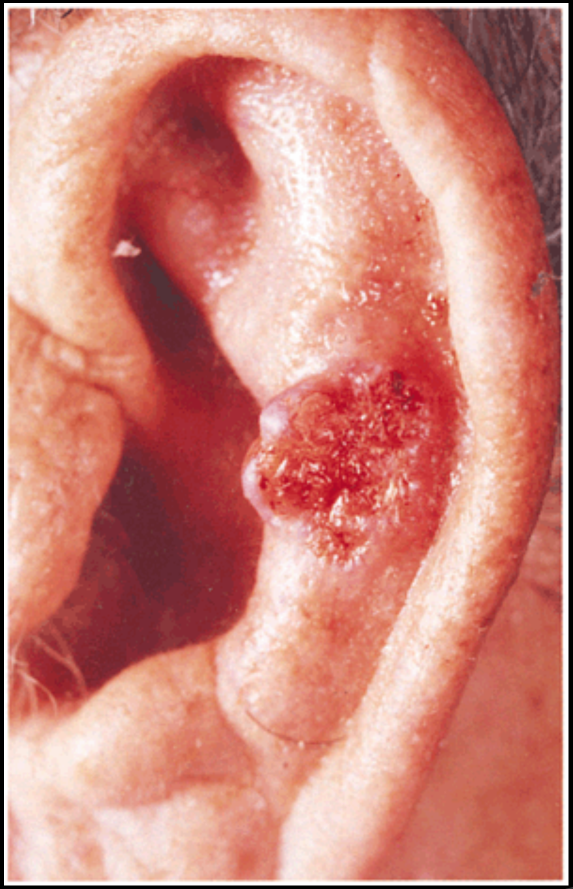
Discoid lupus lesion
[SLE]



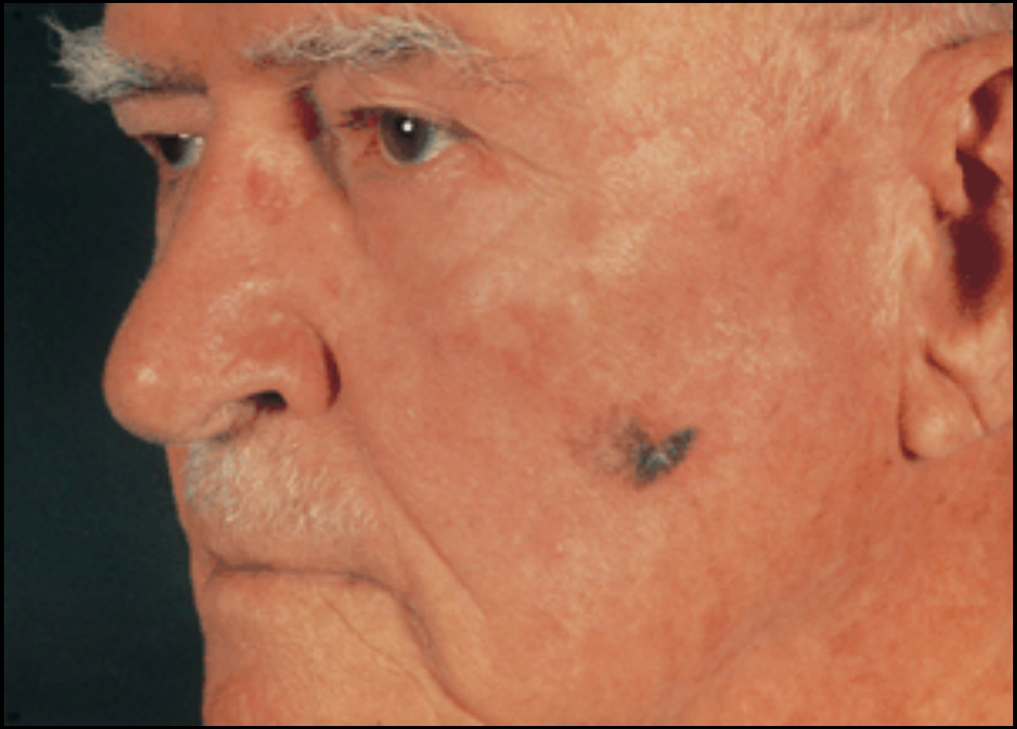
Saddle nose
[Wegner granulomatosis]



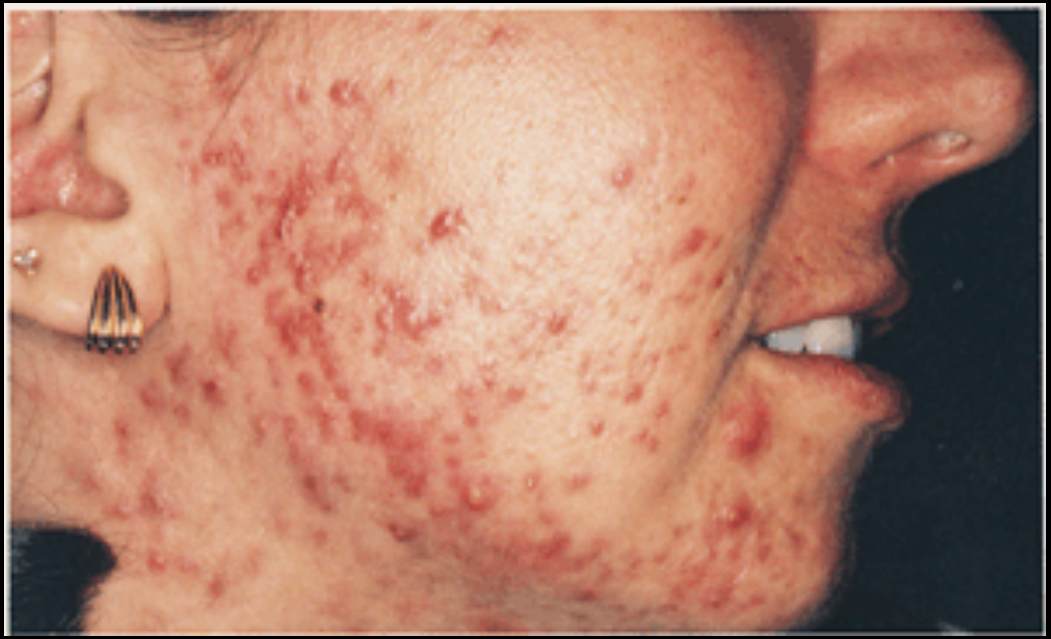
Ulcer with rolled borders [basal cell carcinoma]



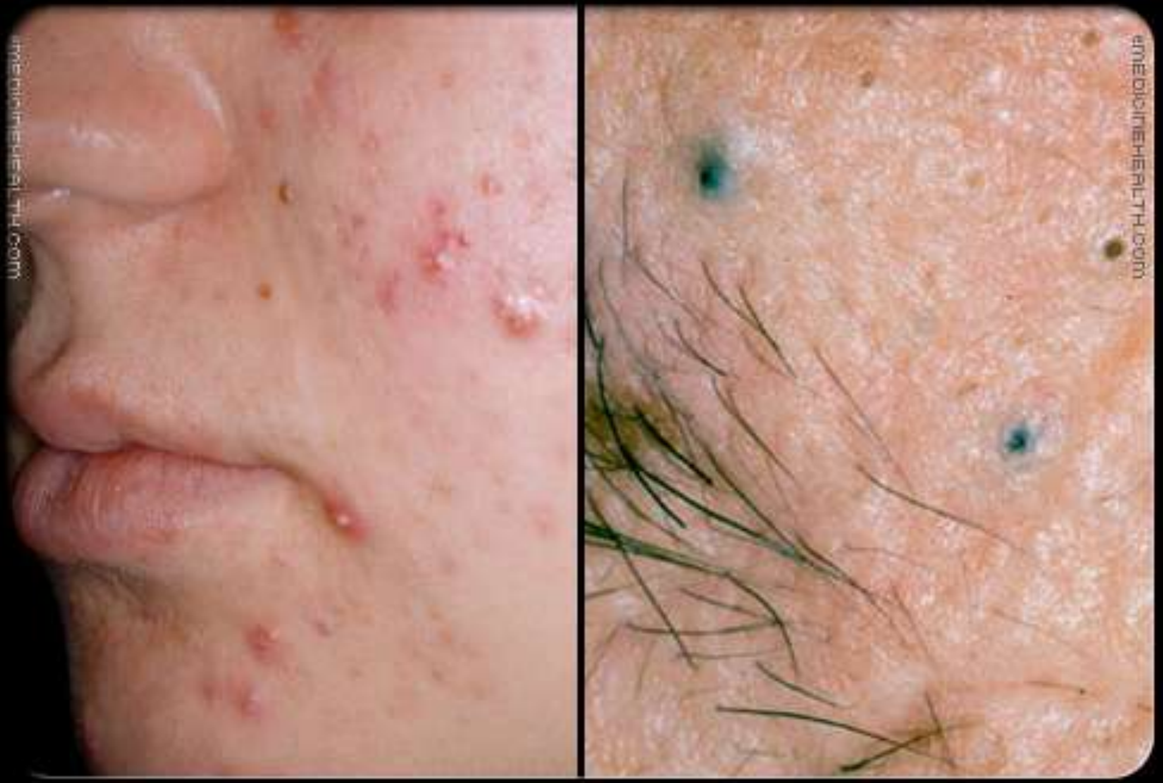
Hyperpigmented elevated lesion [malignant melanoma]



Papules, pustules and comedones
[Acne vulgaris]
(adolescence, steroid therapy)



Whitehead and blackhead comedones
[Acne vulgaris]
(adolescence, steroid therapy)



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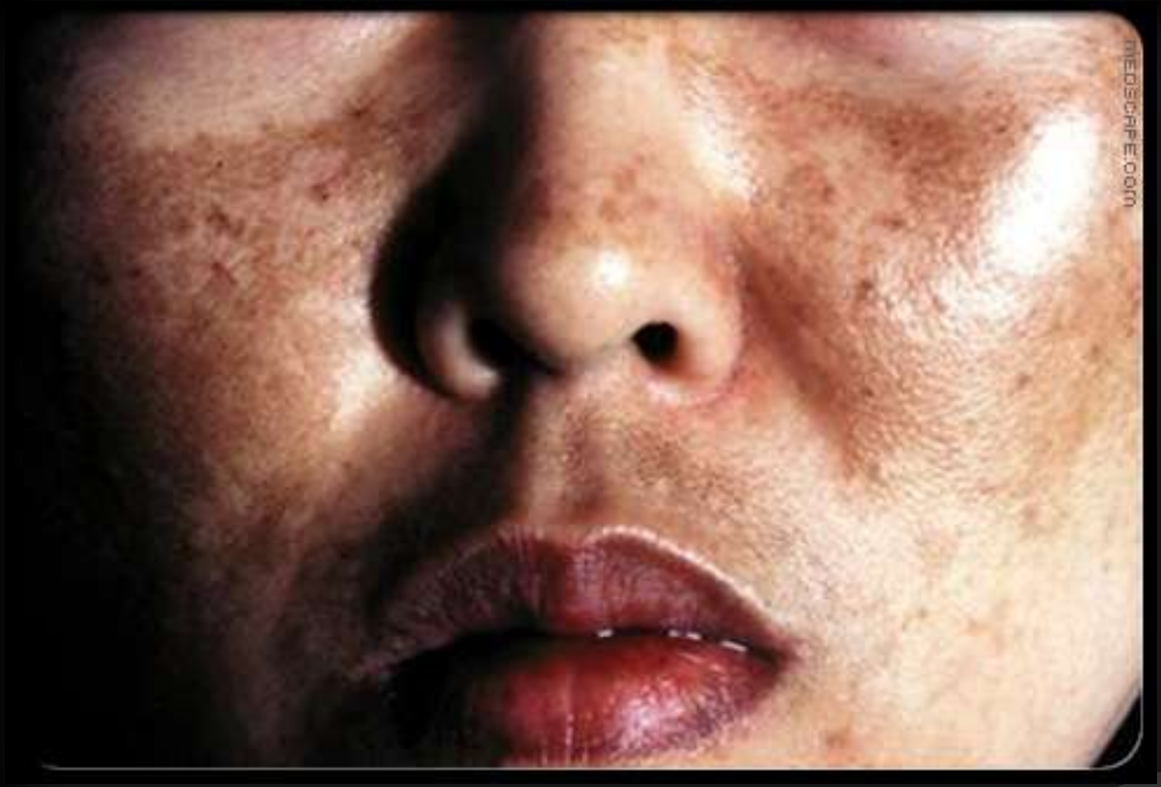
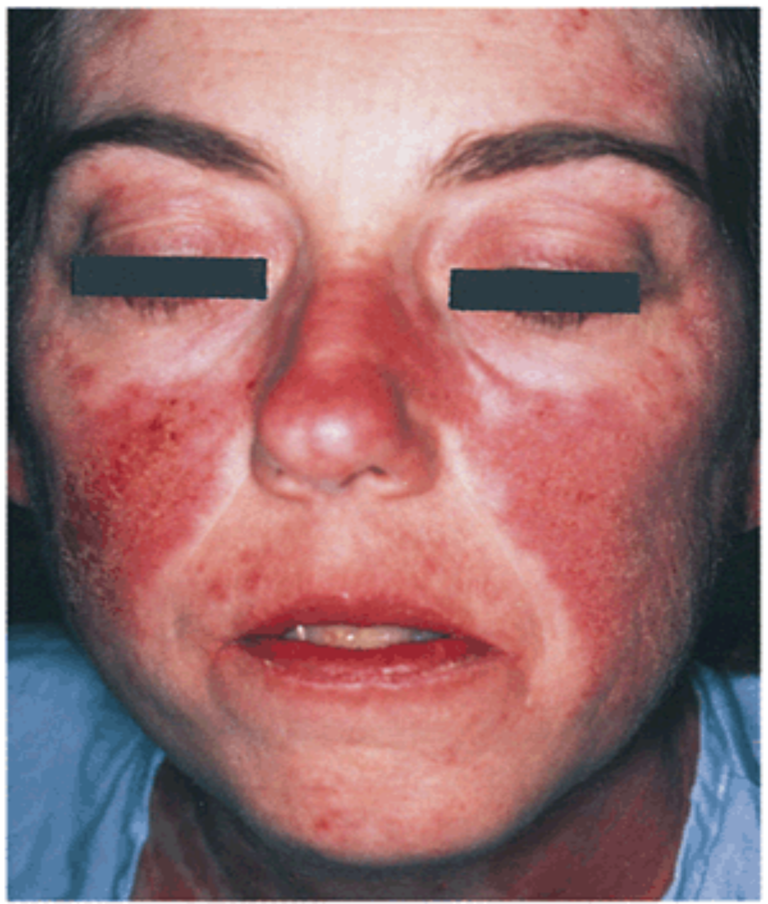
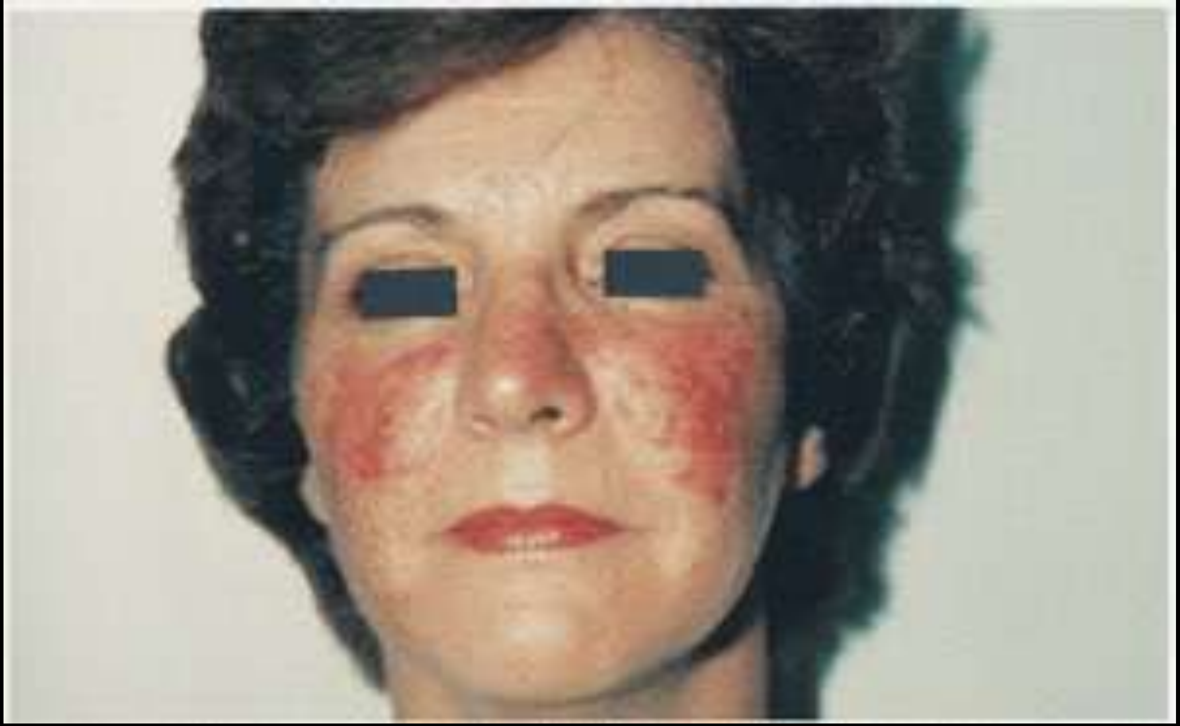
Melasma
(symmetric brown patches on the face)
[pregnancy, oral contraceptive]



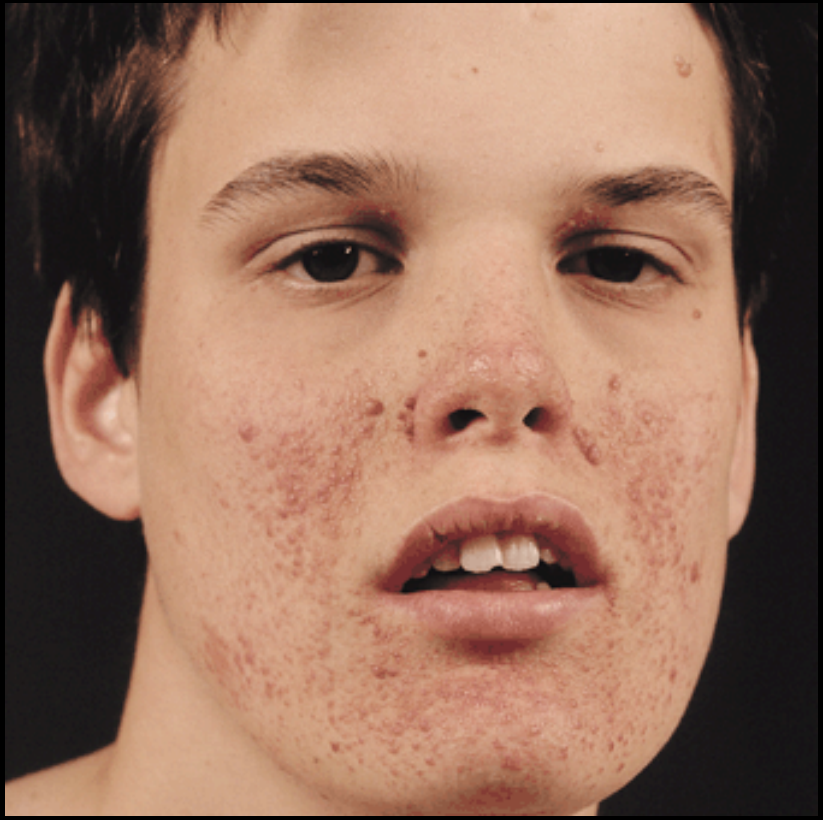
erythematous plaque over the nose (butterfly rash) [SLE]



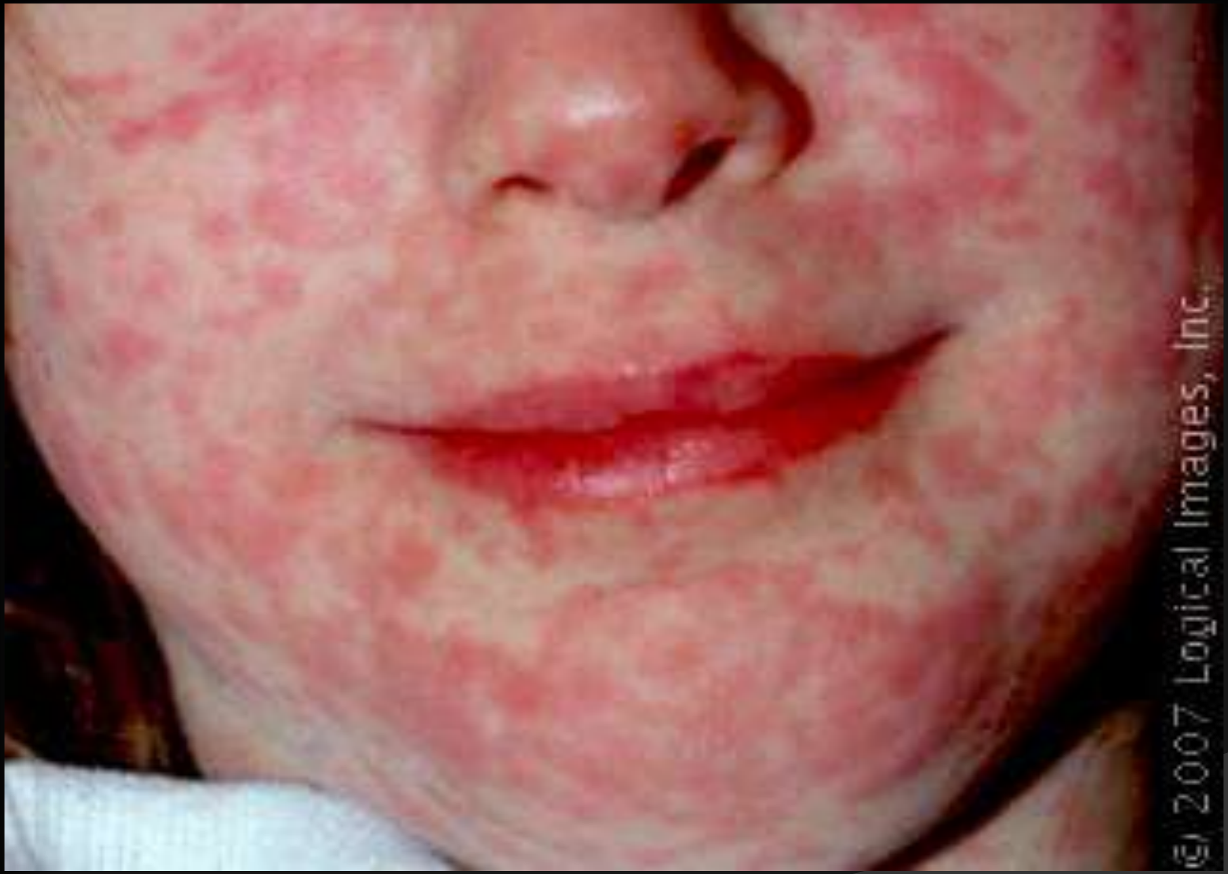
Papules, pustules and telangiectasia on erythematous plaque [acne rosacea]



Multiple angiofibroma
[tuberous sclerosis]



Maculopapular rash [measles, drug eruption]



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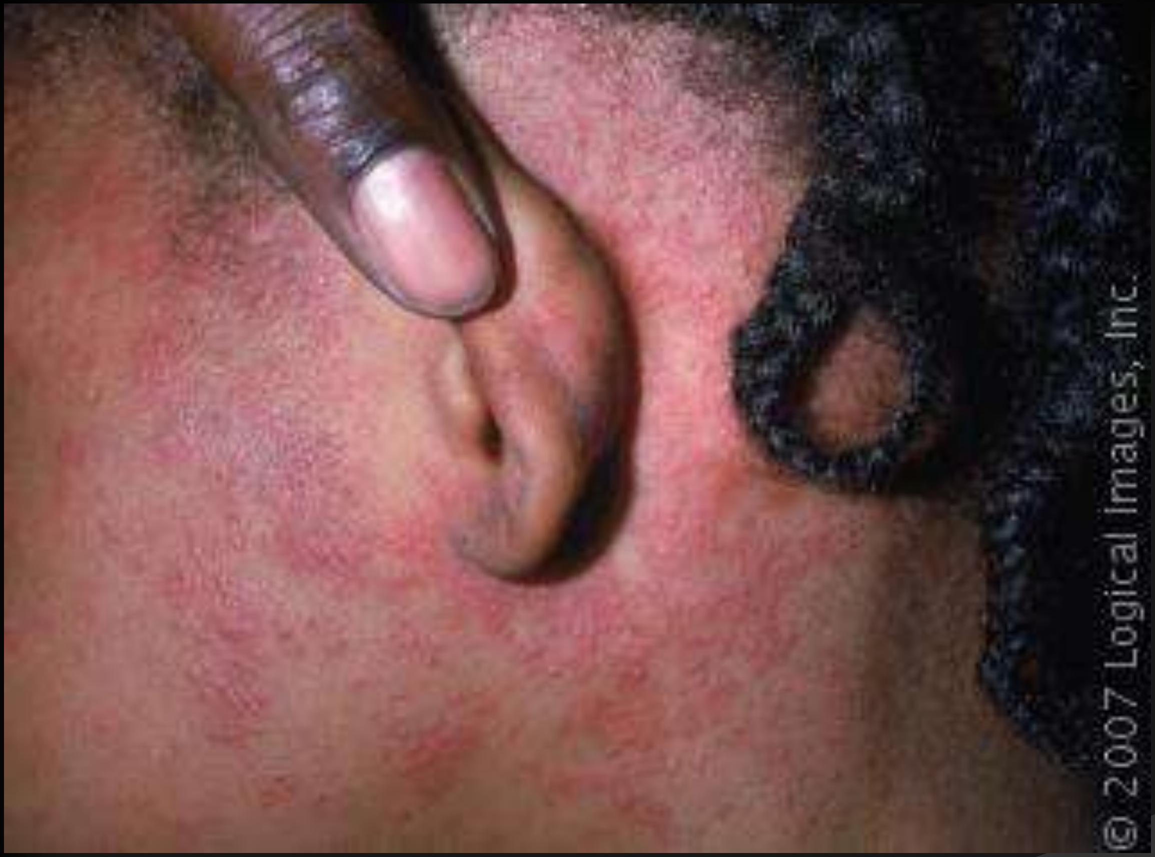
Maculopapular rash behind the ear [measles]



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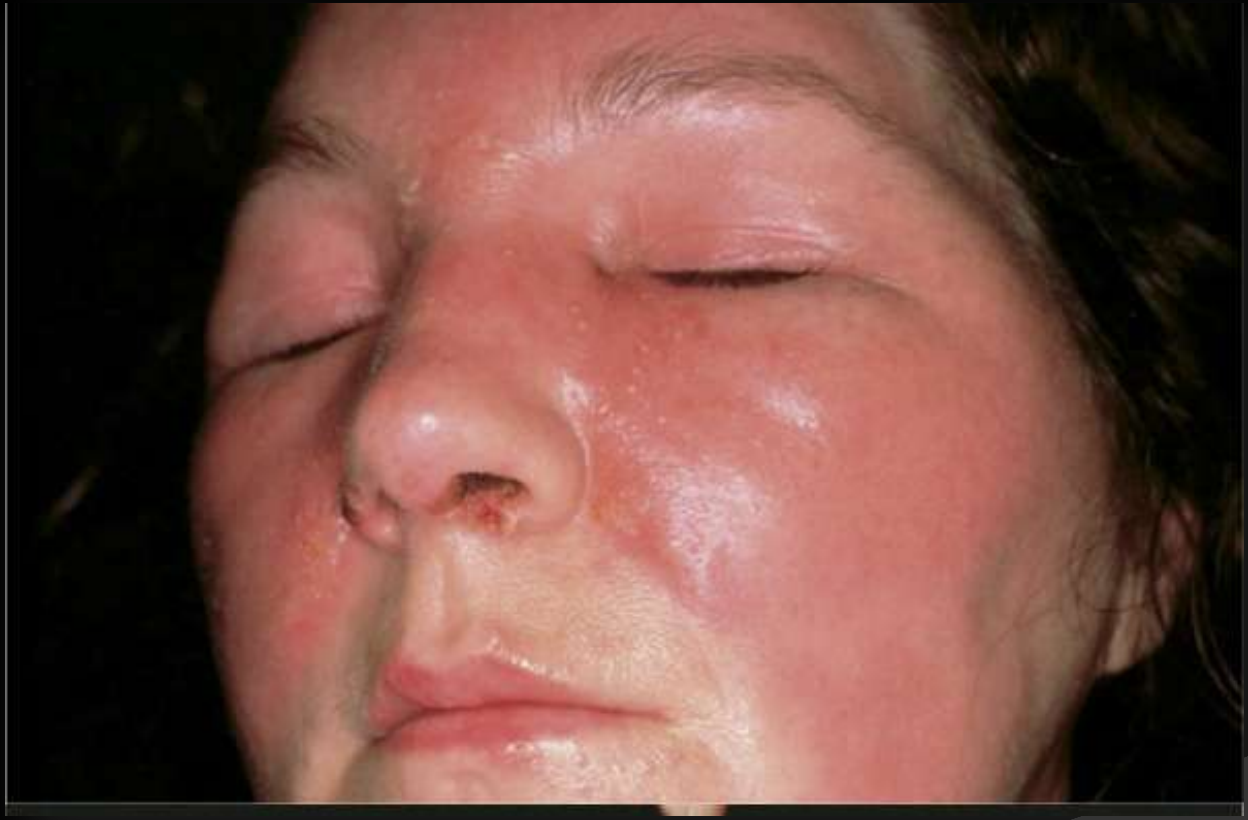
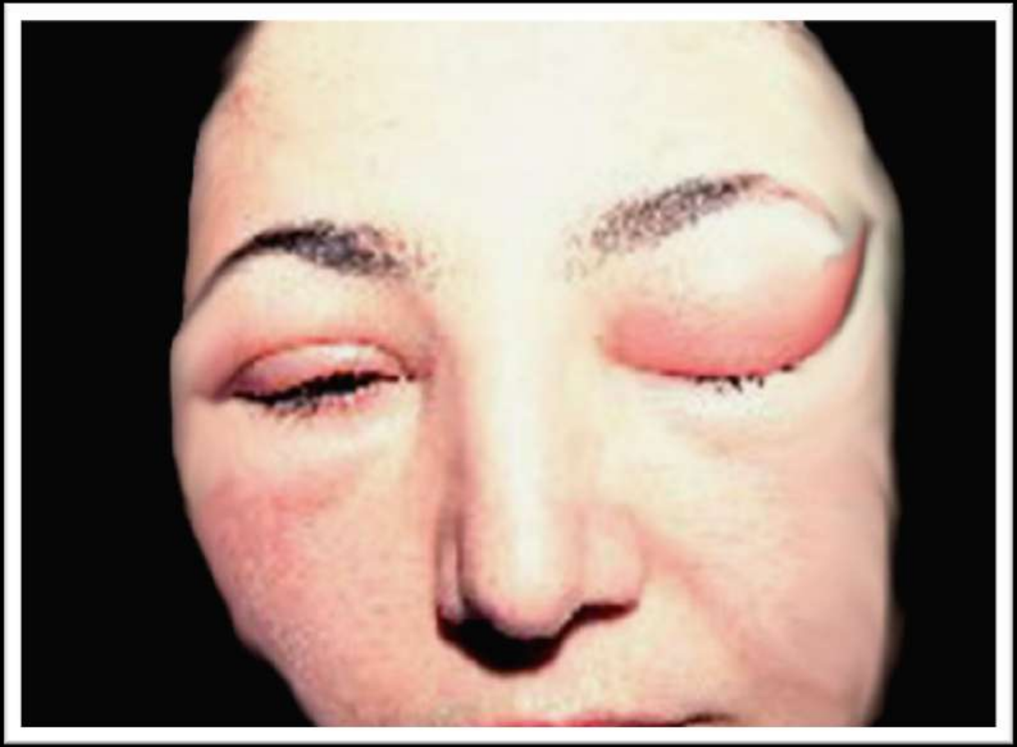
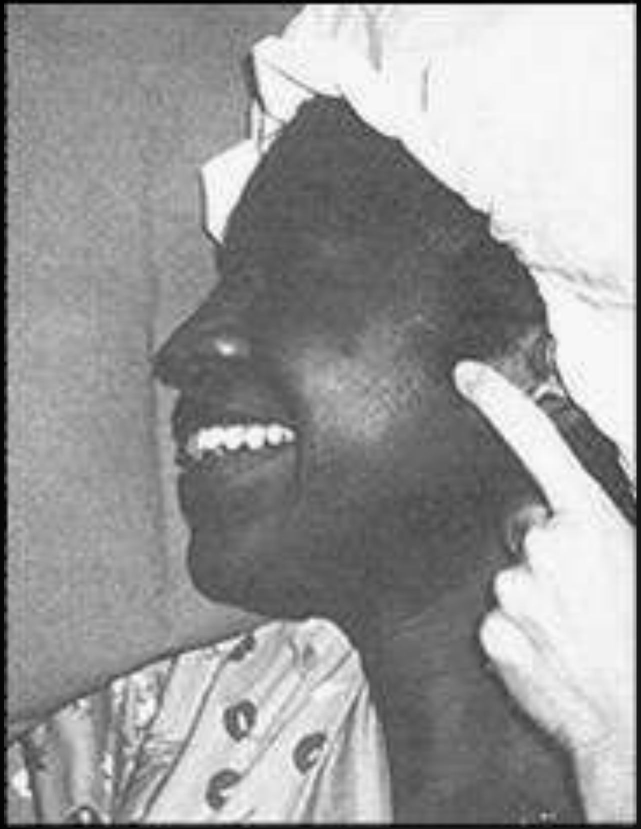
Erythema and edema of the face
[Erysipelas / streptococcal infection]



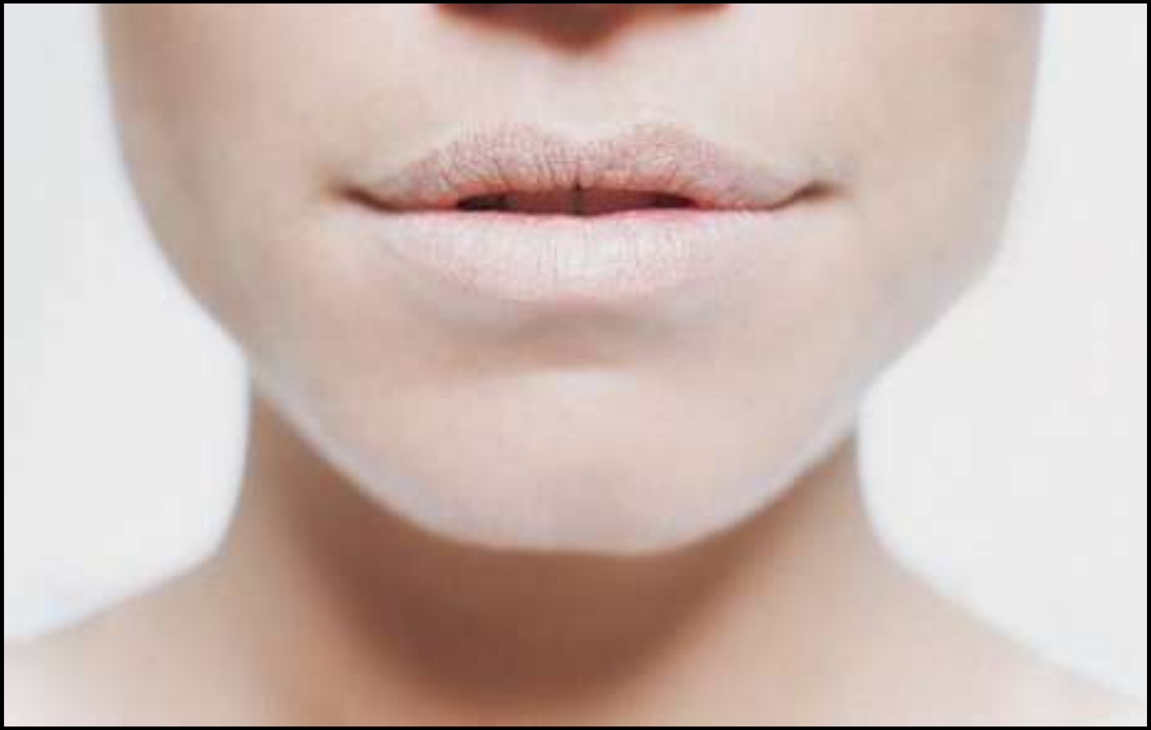
Periorbital edema
[angioedema, hereditary or IgE dependent]



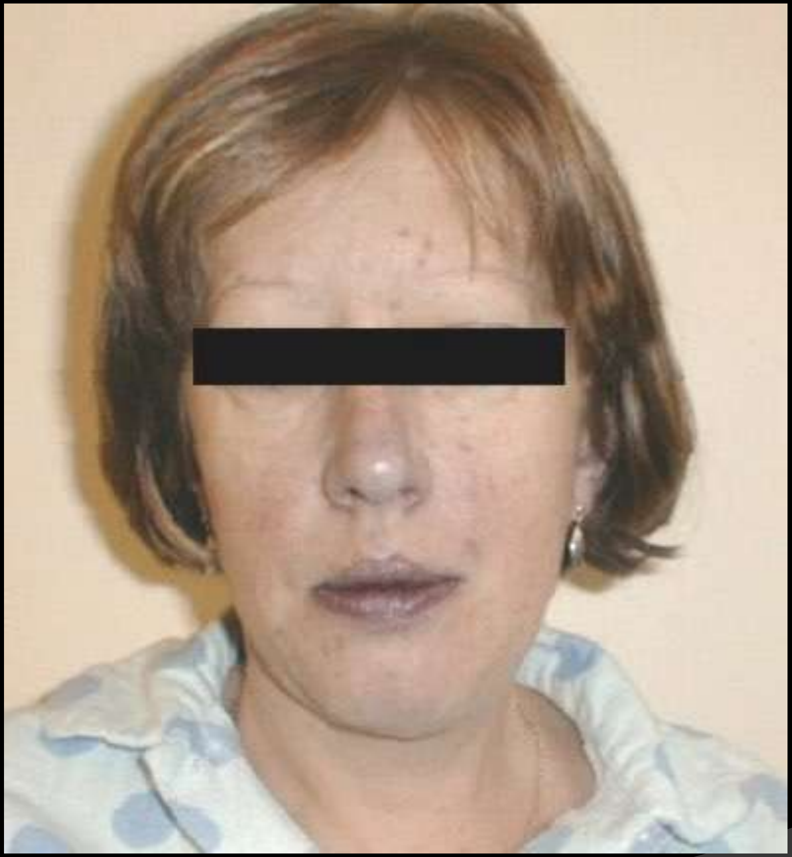
Chvostek's sign [hypoparathyroidism]



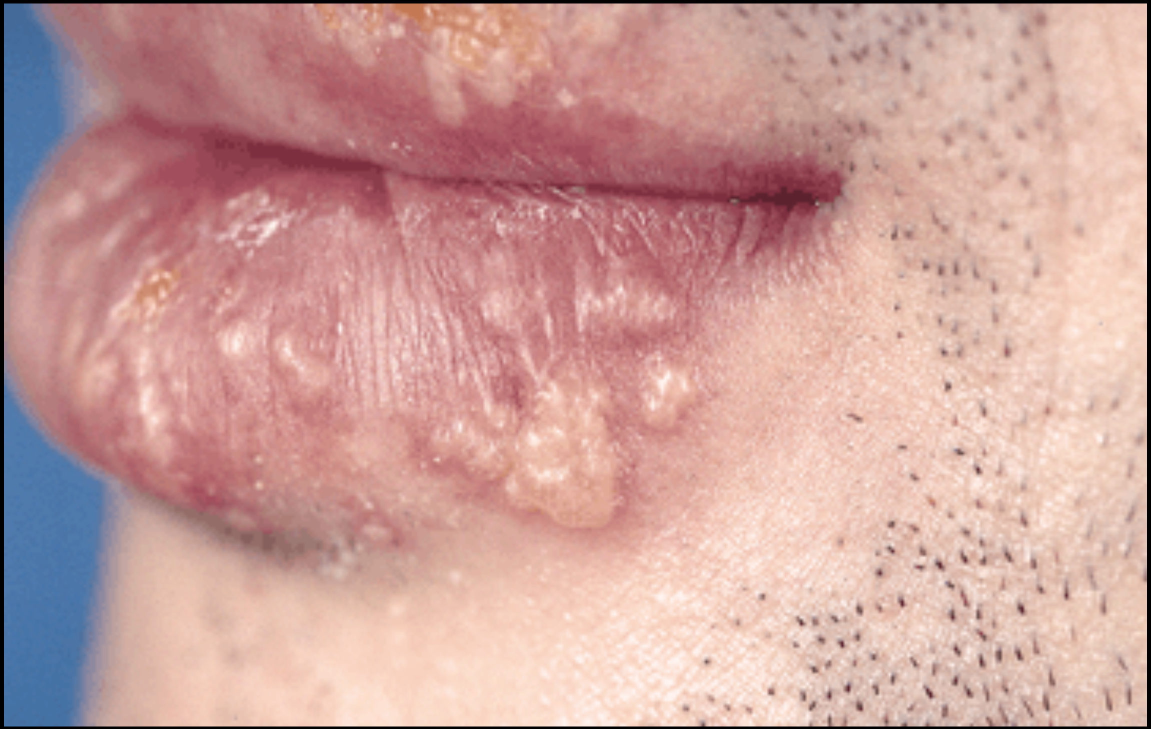
Pallor of the lips
[anemia]



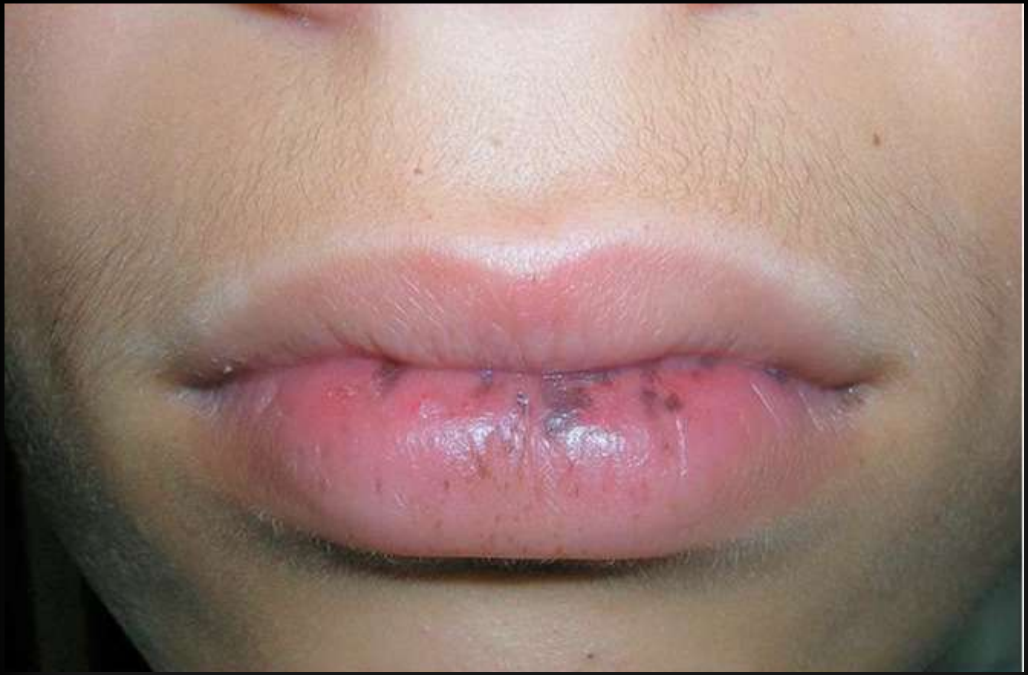
Bluish discoloration of the lips [central cyanosis]



Confluent vesicles on the lips [Herpes simplex infection]

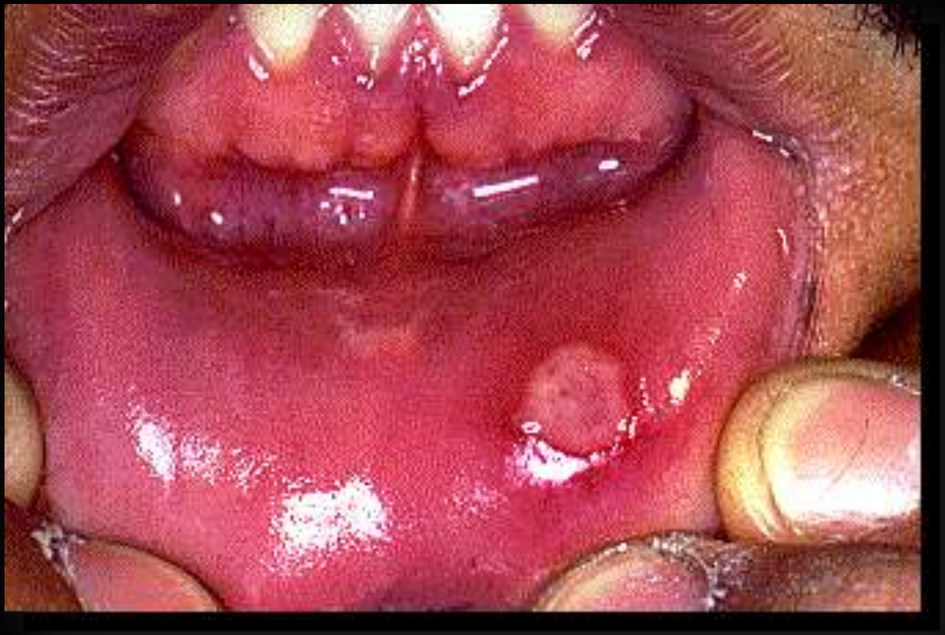


Dark brown spots on the lips
[Peutz- Jegher’s disease]

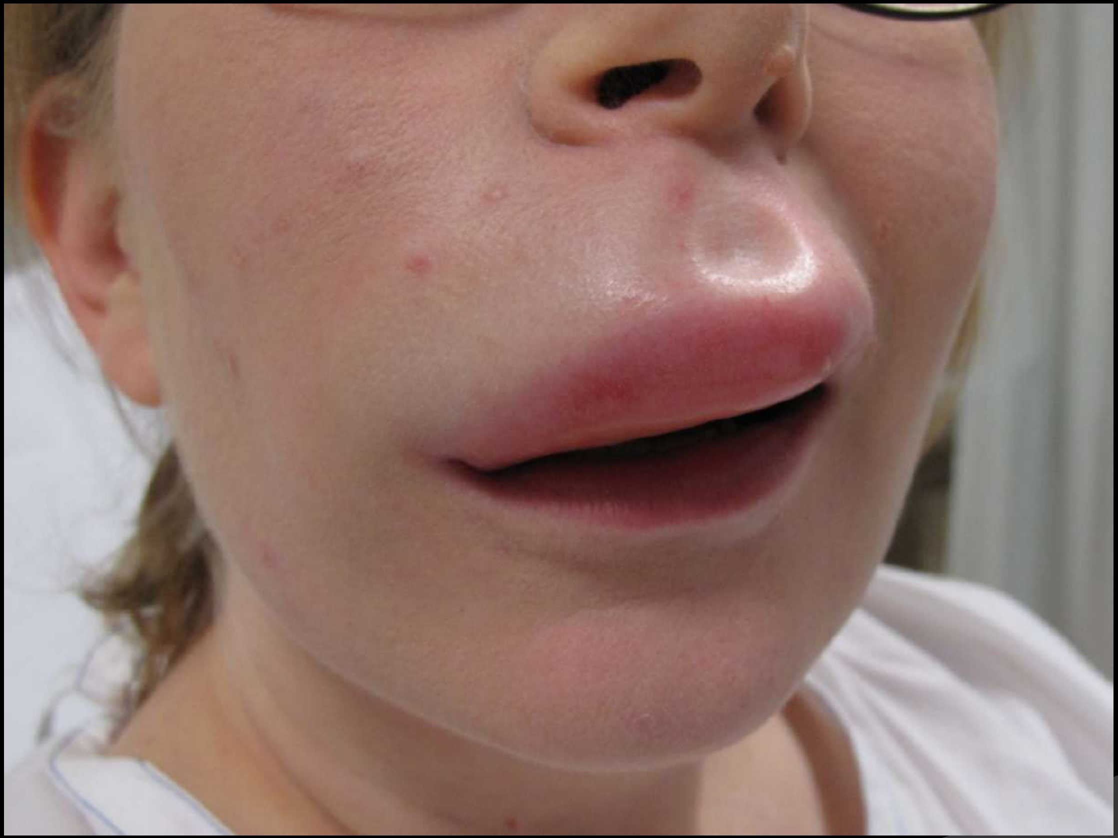


Aphthous ulcer

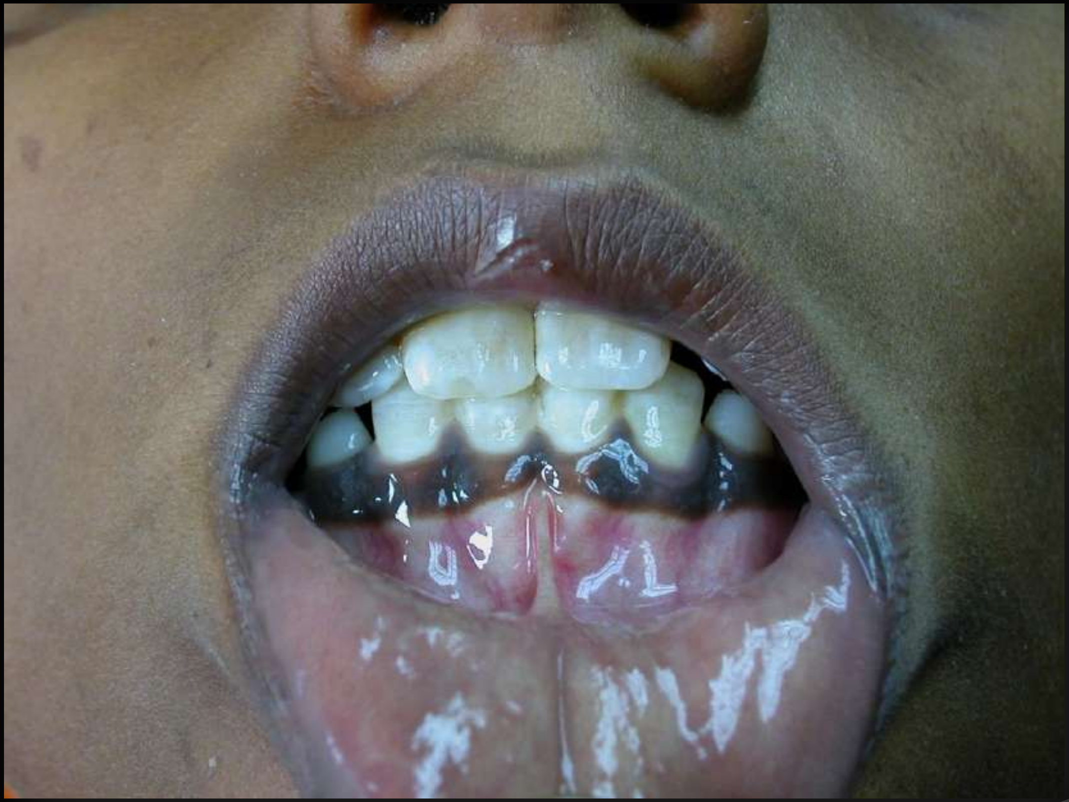
[idiopathic, Behçet's disease, IBD, HIV infection]



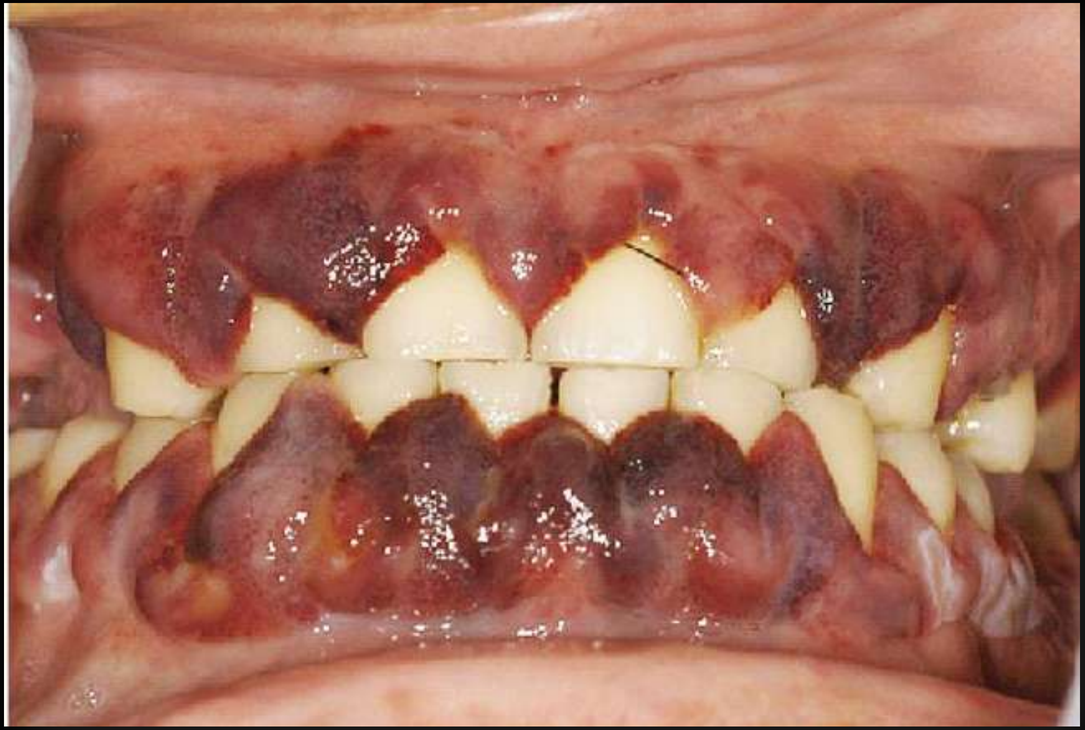
Swelling of the lip [angioedema, hereditary or IgE dependent]



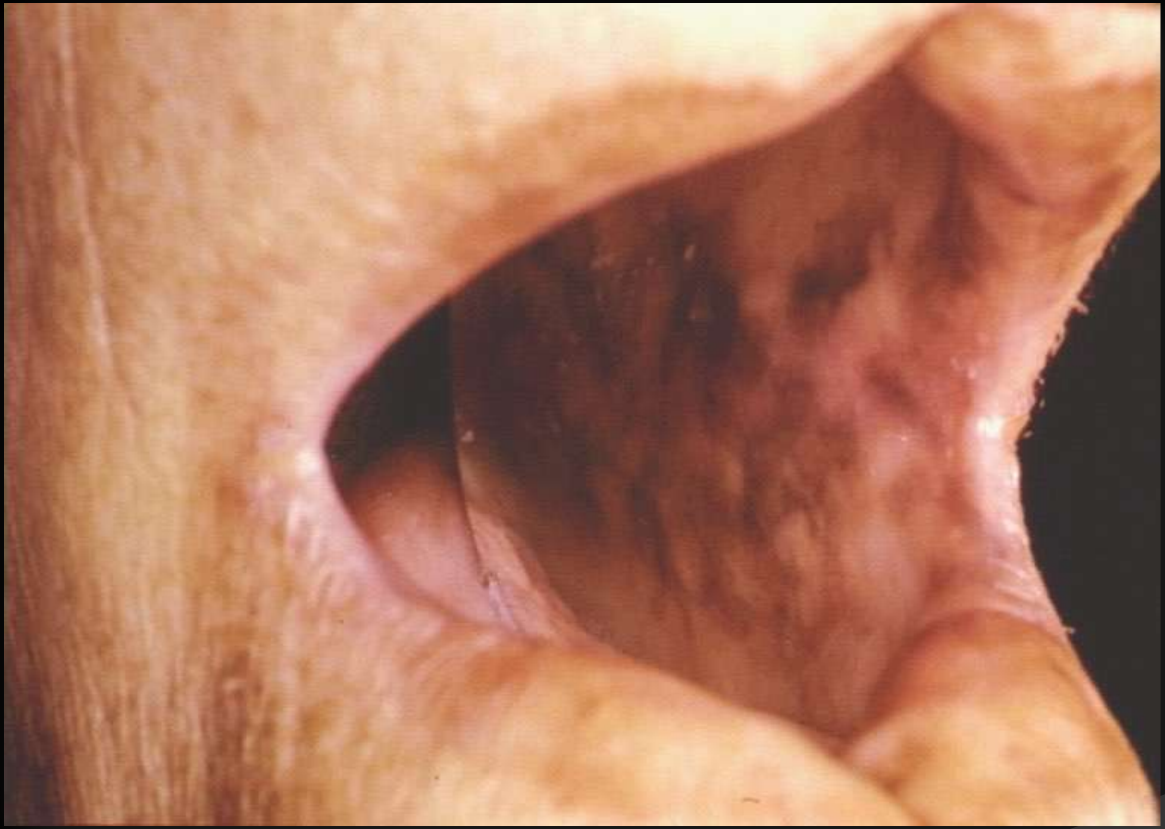
Gum hyperpigmentation [Addison's disease]



Gum hypertrophy
[calcium channel blockers, Phenytoin therapy and AML M5]

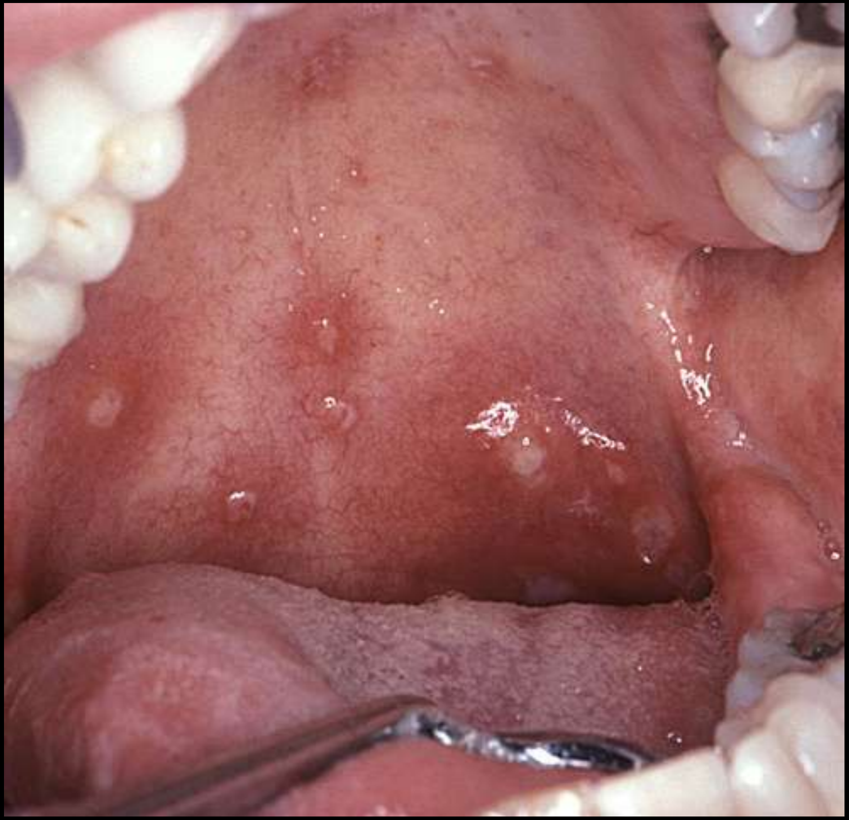


Buccal hyperpigmentation [Addison's disease]

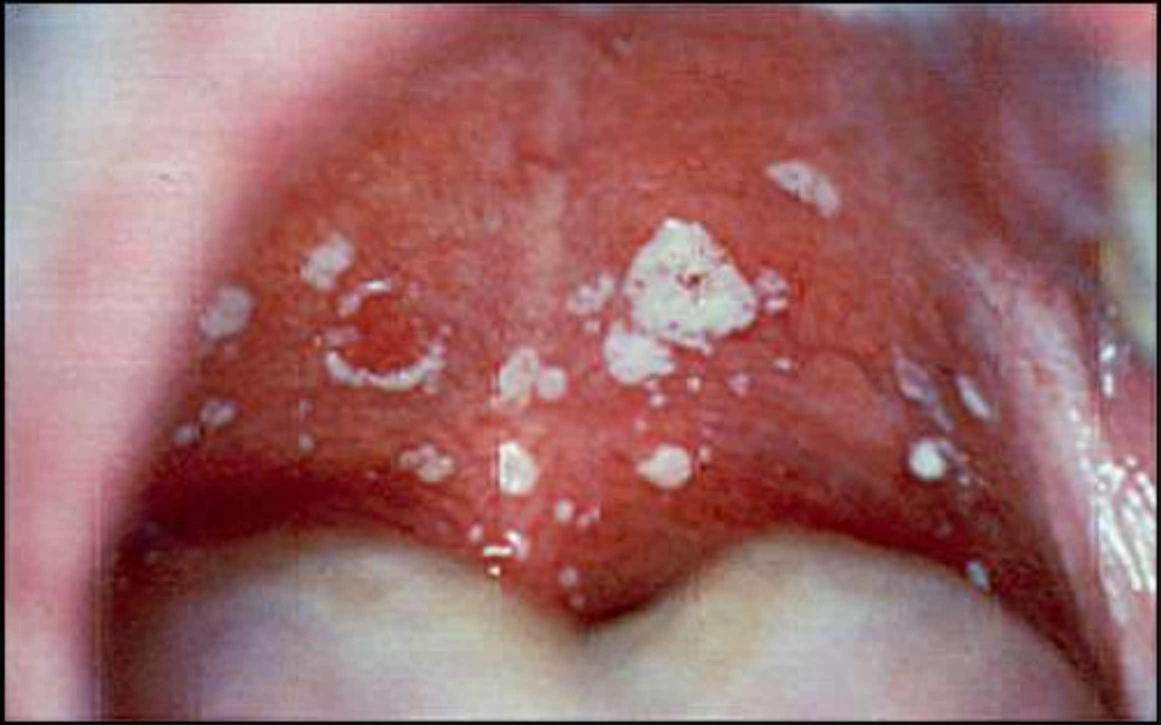


Multiple aphthous ulcers

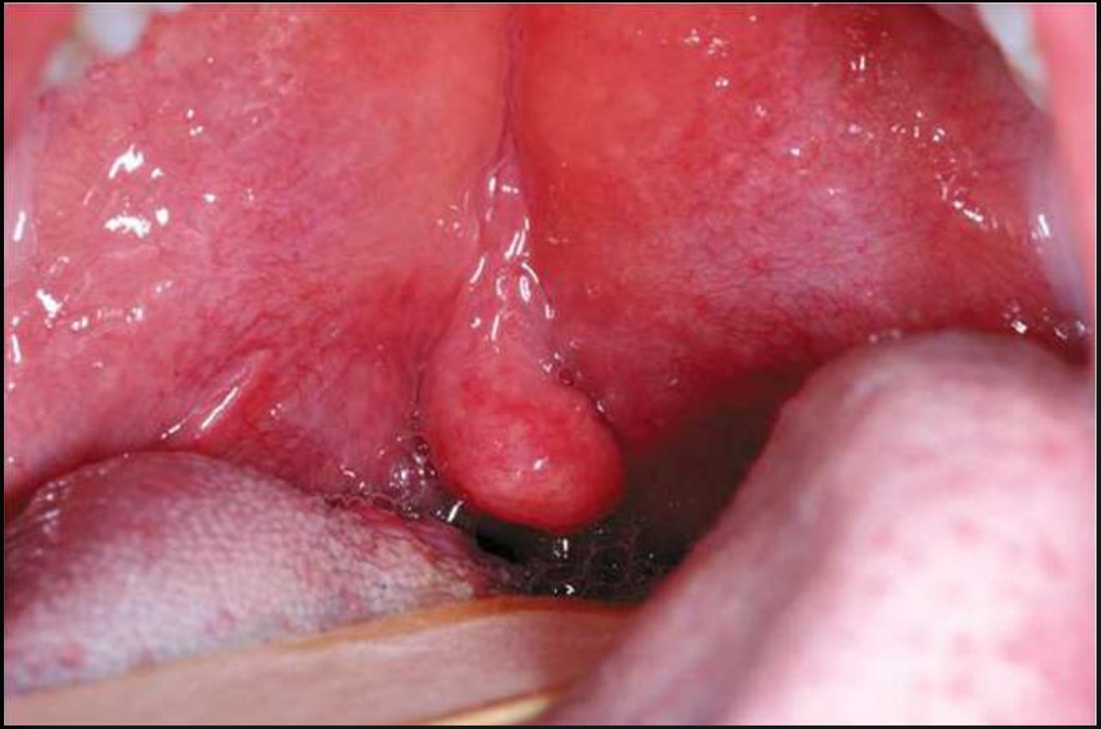
[idiopathic, Behçet's disease, IBD, HIV infection]



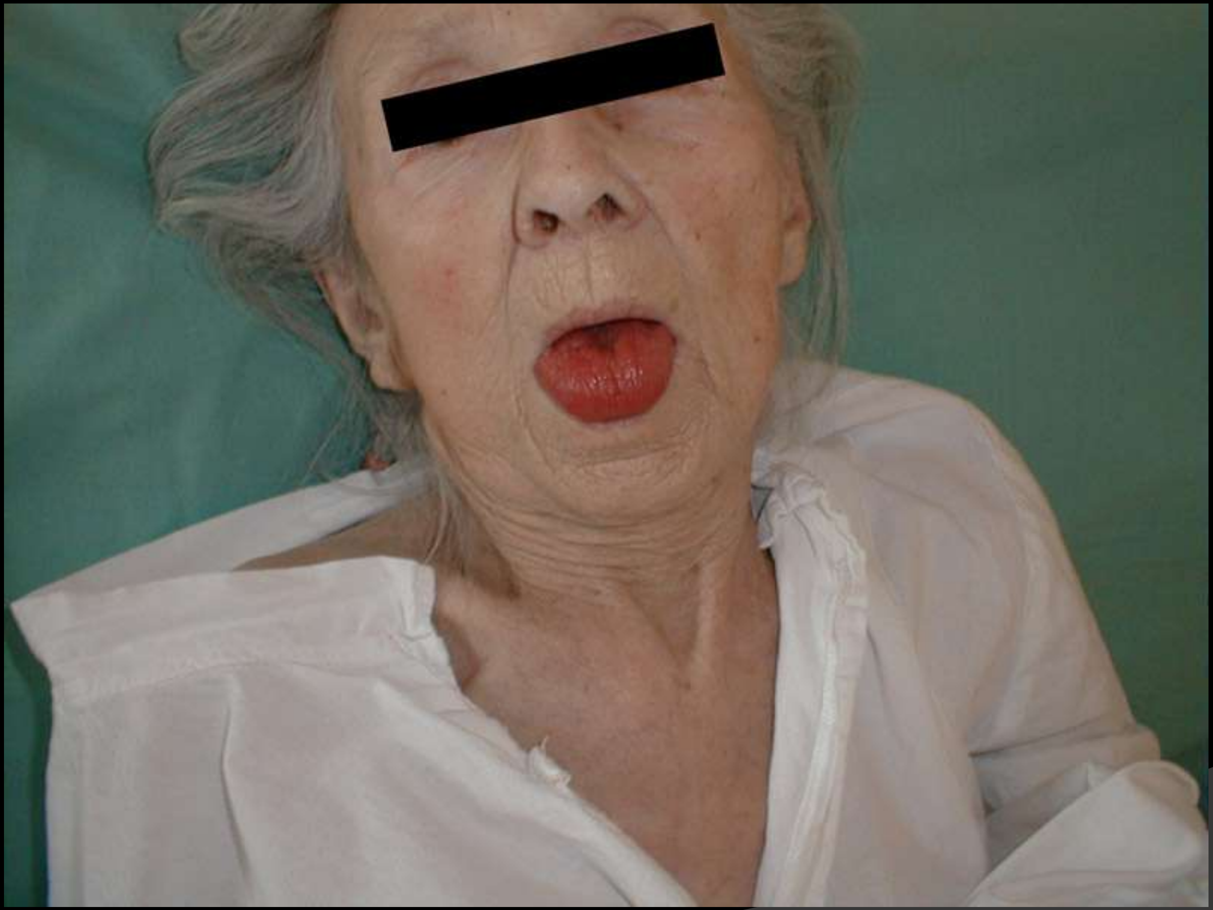
White patches of oral mucosa [Candida albicans infection]



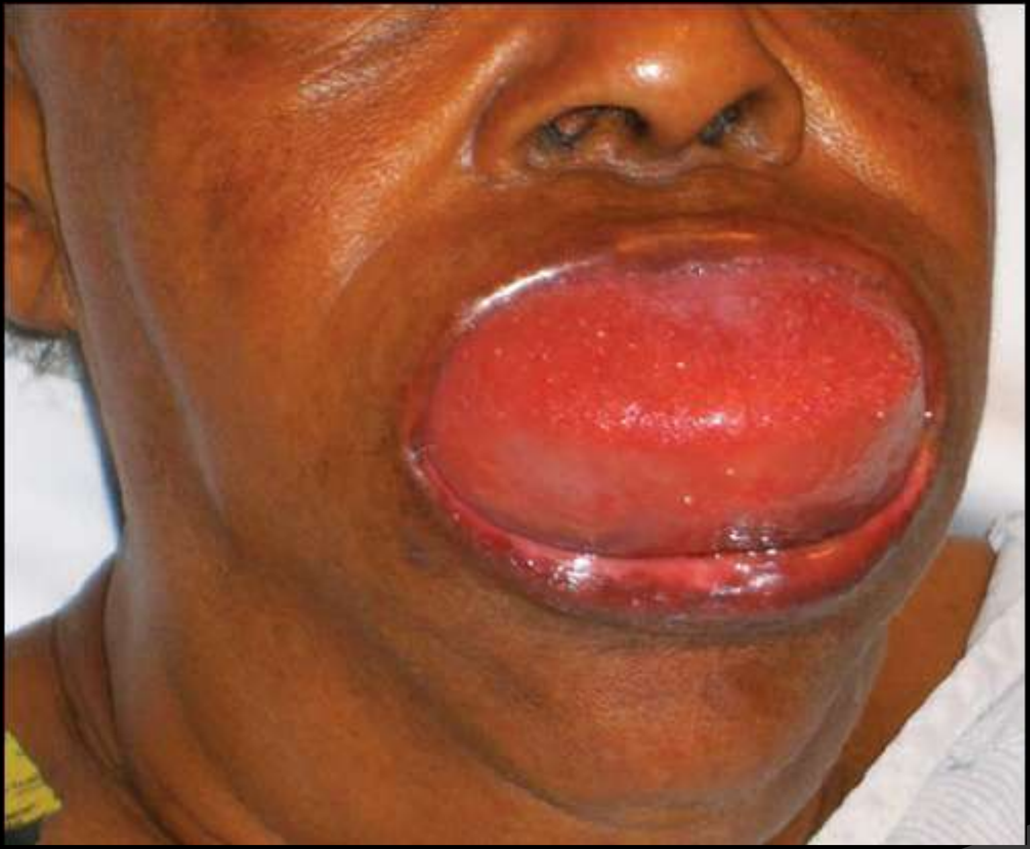
Tonsillar enlargement
[Tonsillar abscess]



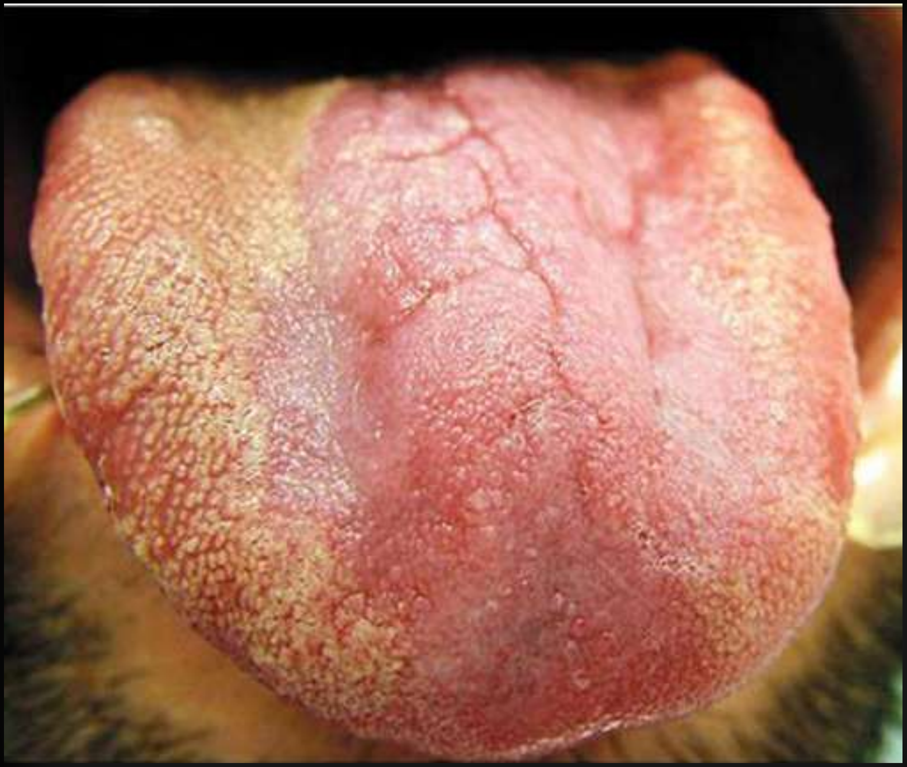
Dry tongue
[dehydration]



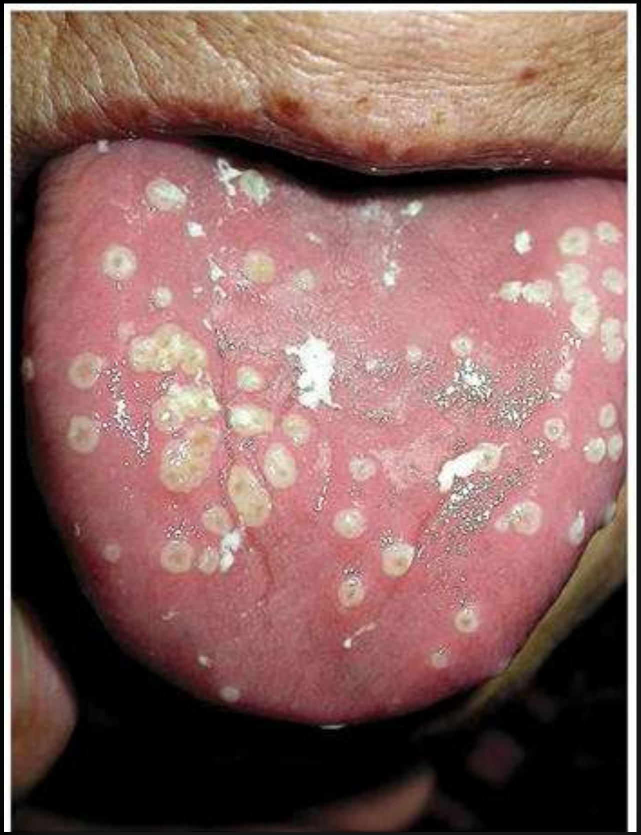
Swelling of the tongue [angioedema, hereditary or IgE dependent]



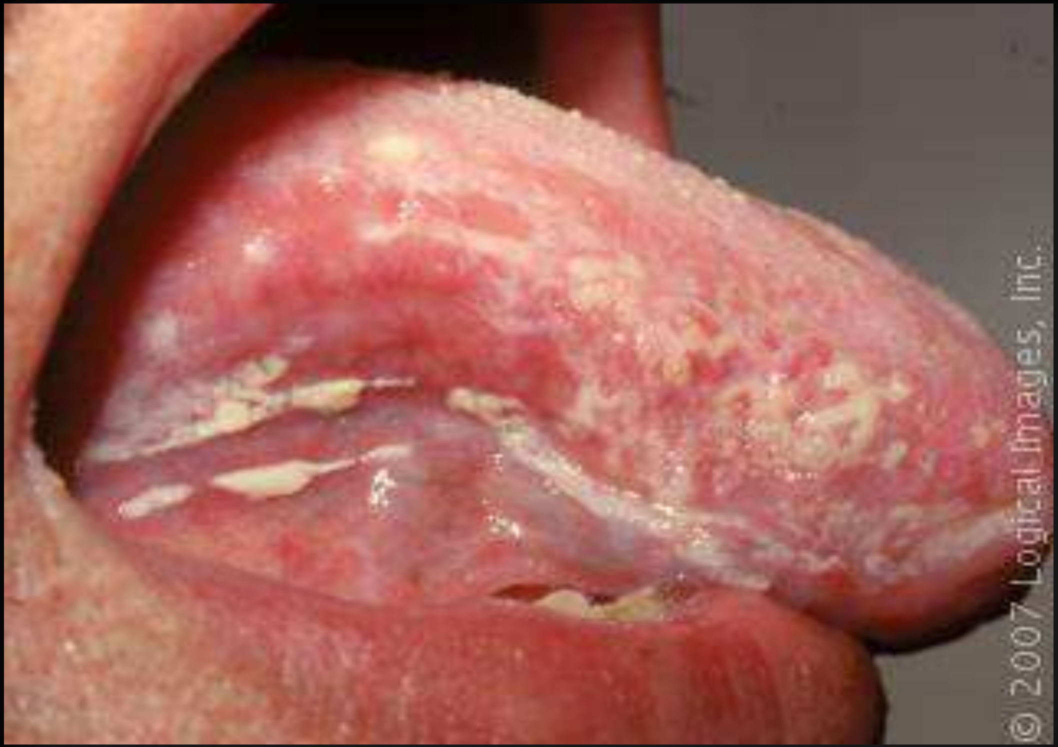
Atrophic glossitis
[B12 and iron deficiency]



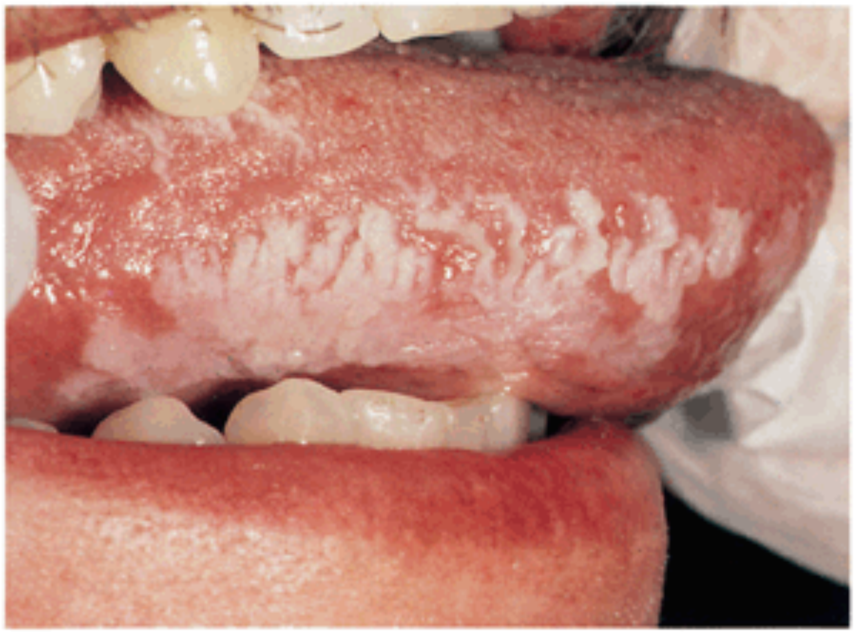
Herpes glossitis
[Herpes simplex infection]



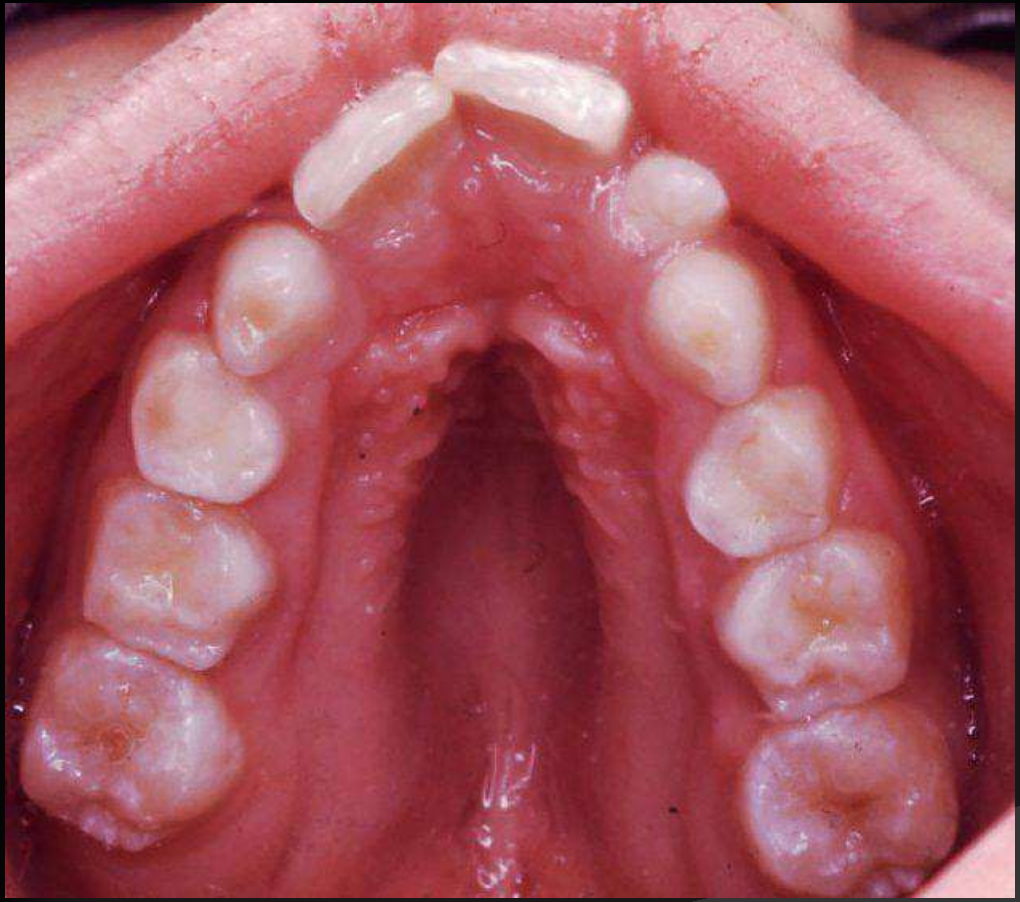
White patches on the tongue [Candida albicans infection]



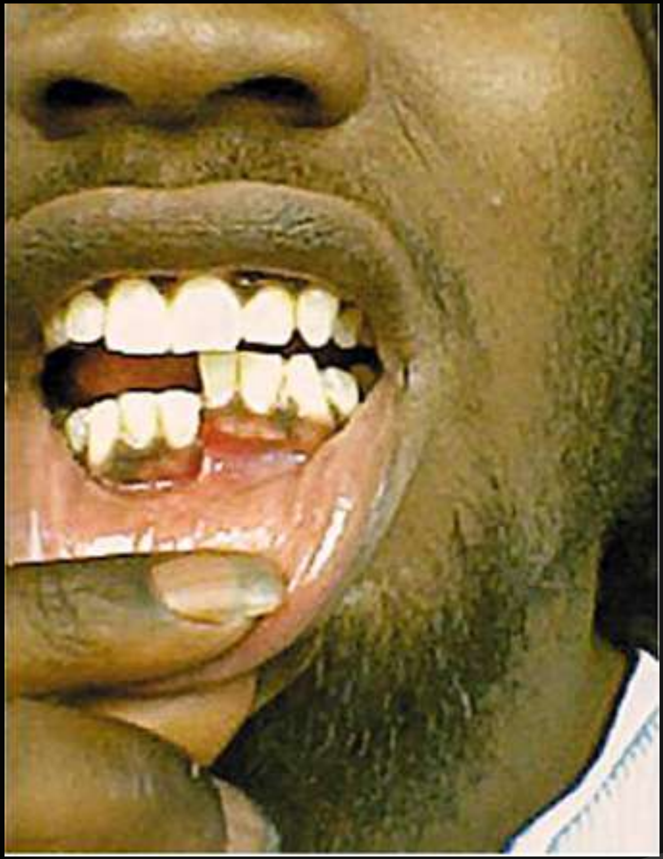
White plaques on the tongue
[Leukoplakia /Epstein Barr virus infection]



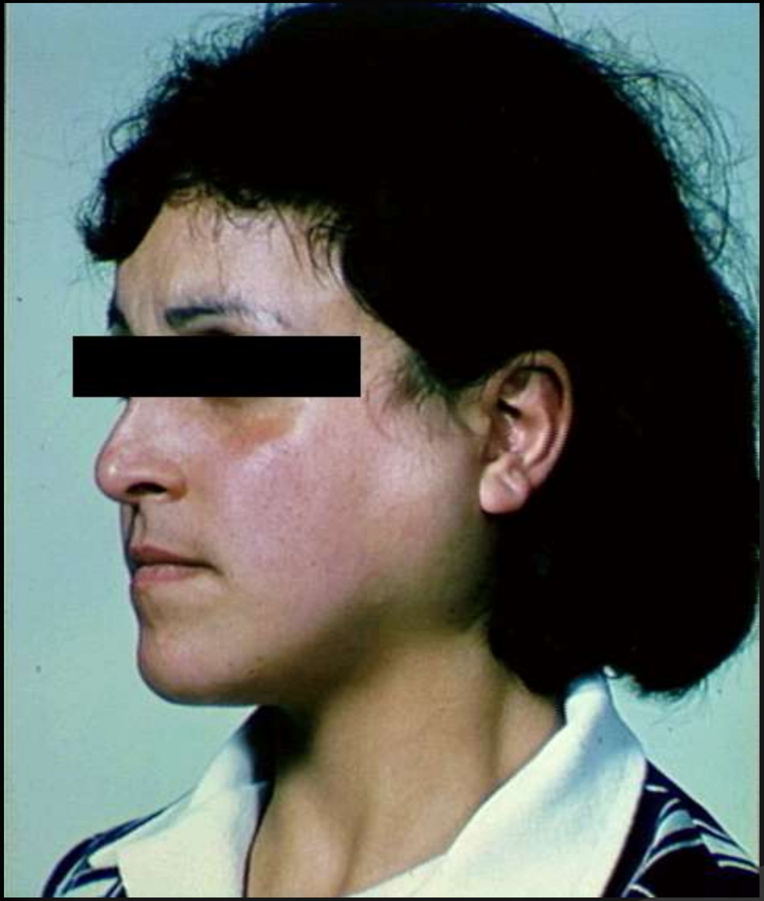
High arched palate
[Marfan syndrome]



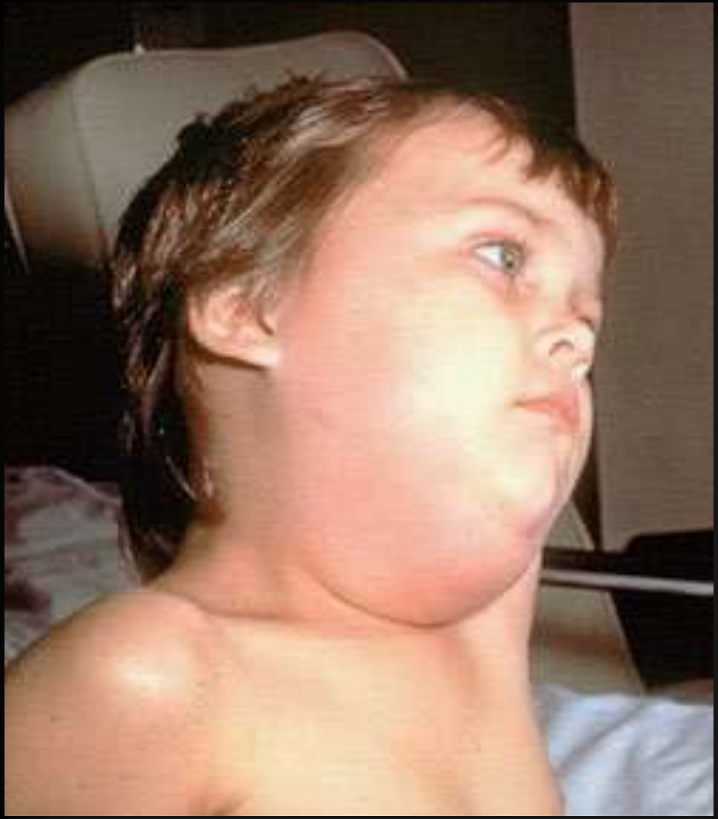
Unequal lower teeth [fracture mandible]



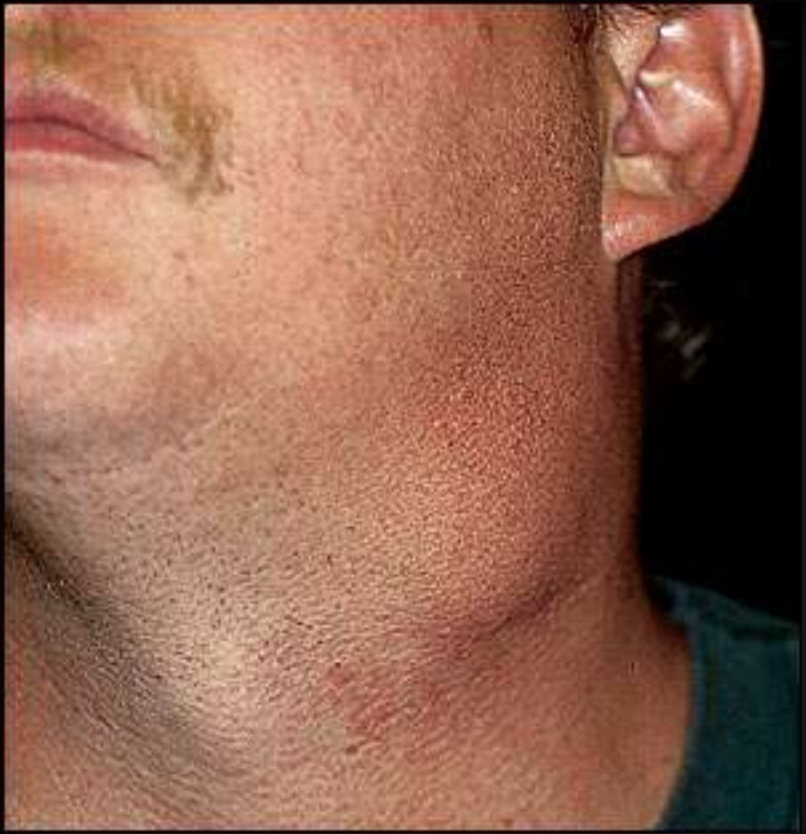
Left parotid enlargement
[Sjögren's syndrome]



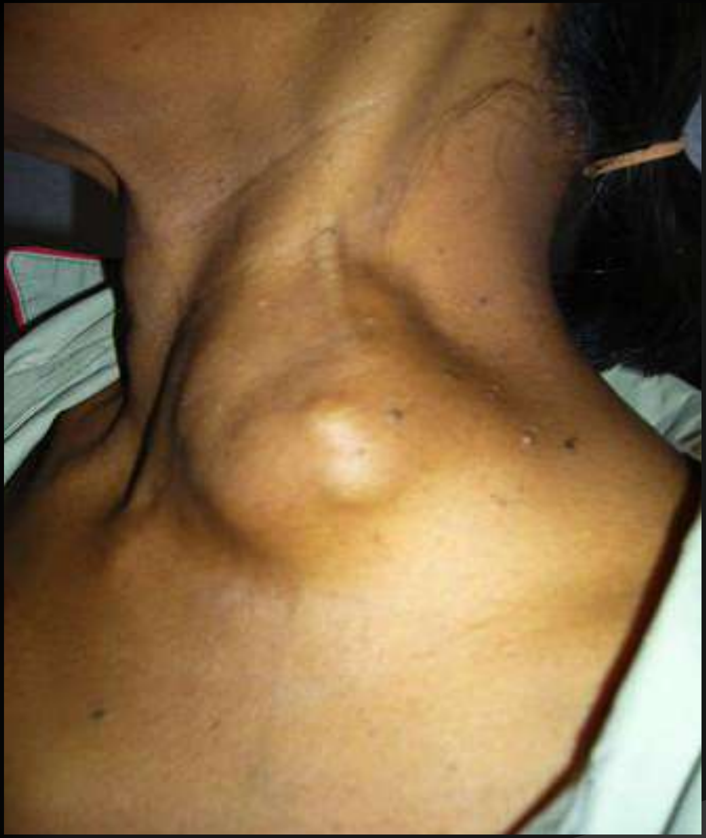
Right parotid enlargement
[mumps]



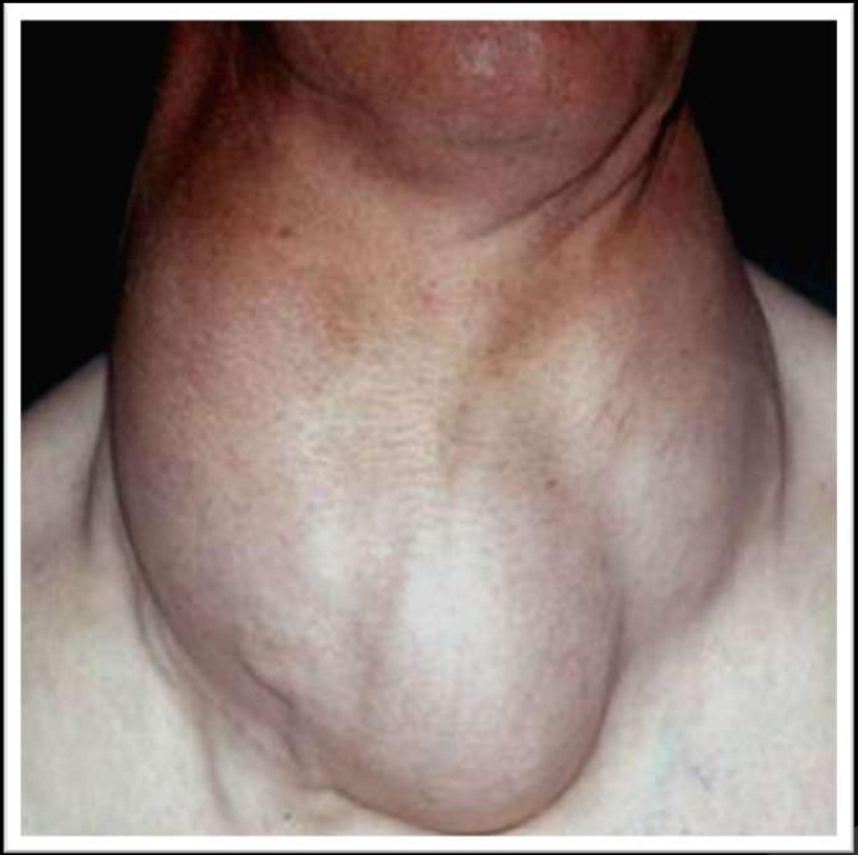
Cervical lymph node enlargement [lymphoma]



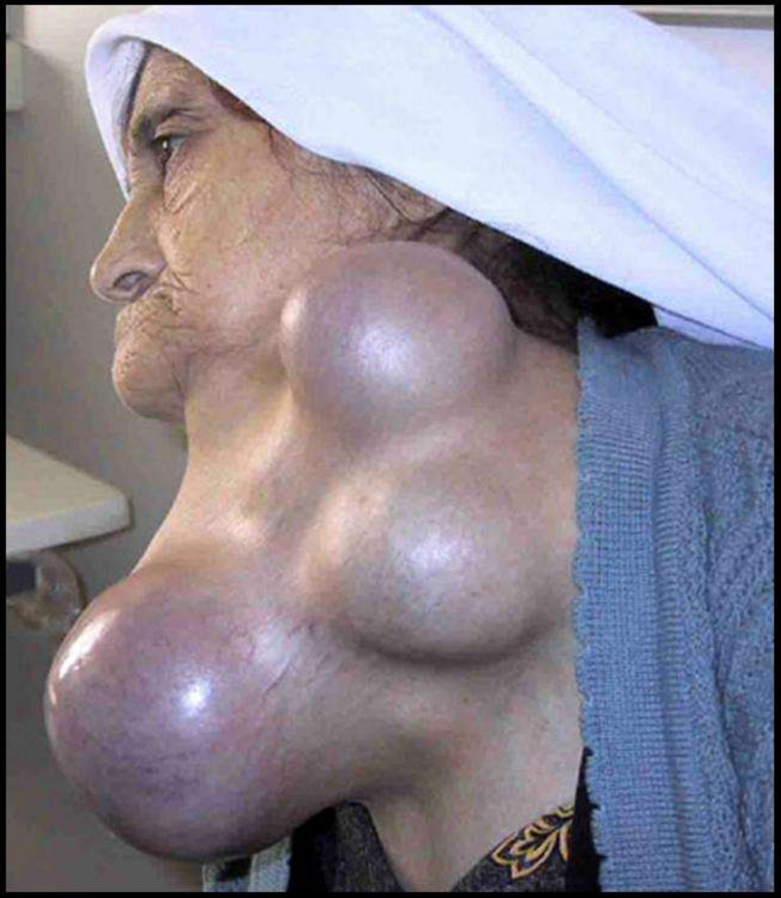
Supraclavicular lymph node enlargement (Virchow's node) [gastric cancer]



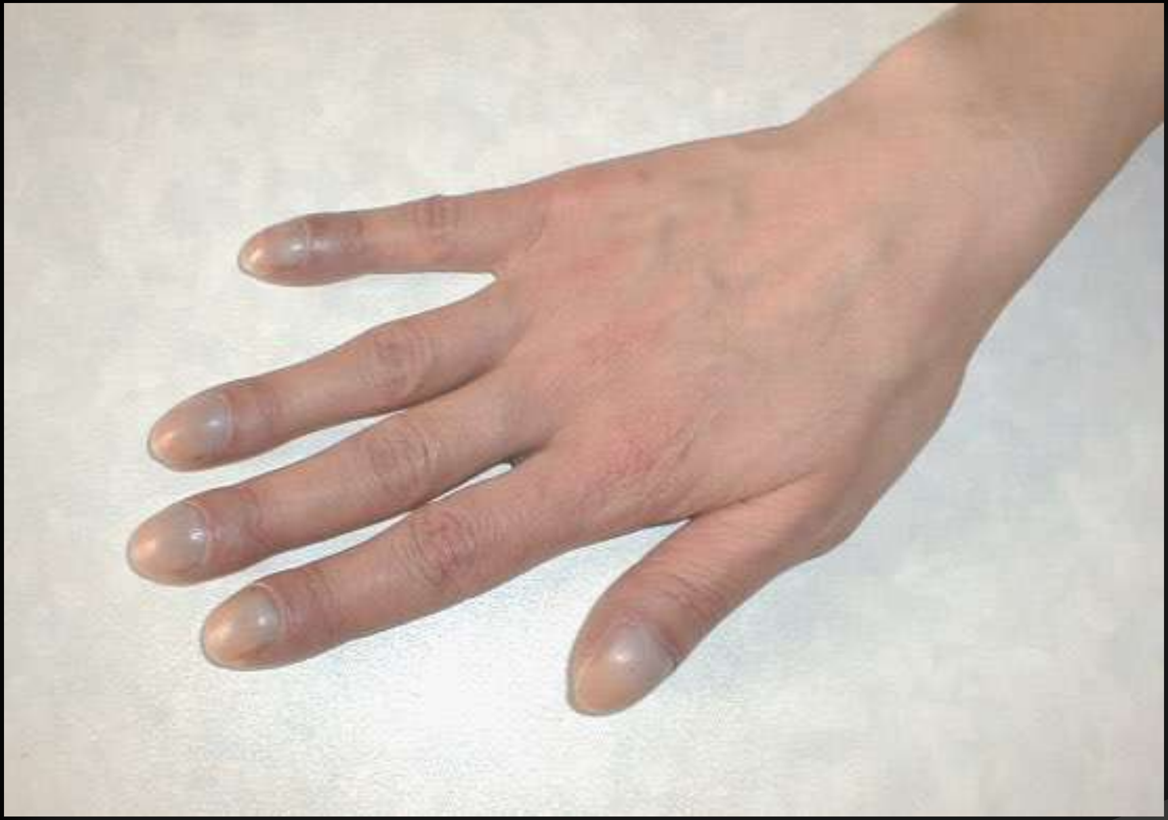
Multinodular goiter
[simple multinodular goiter]



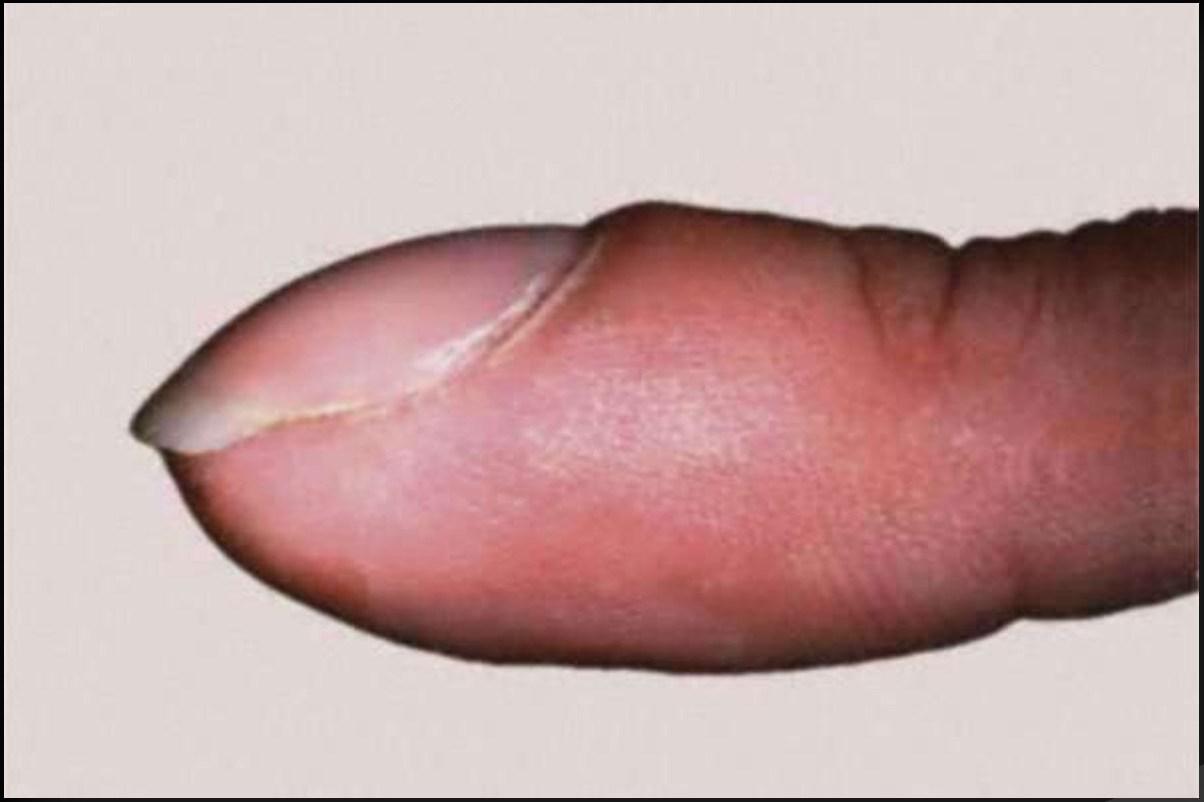
Multinodular goiter
[simple multinodular goiter]



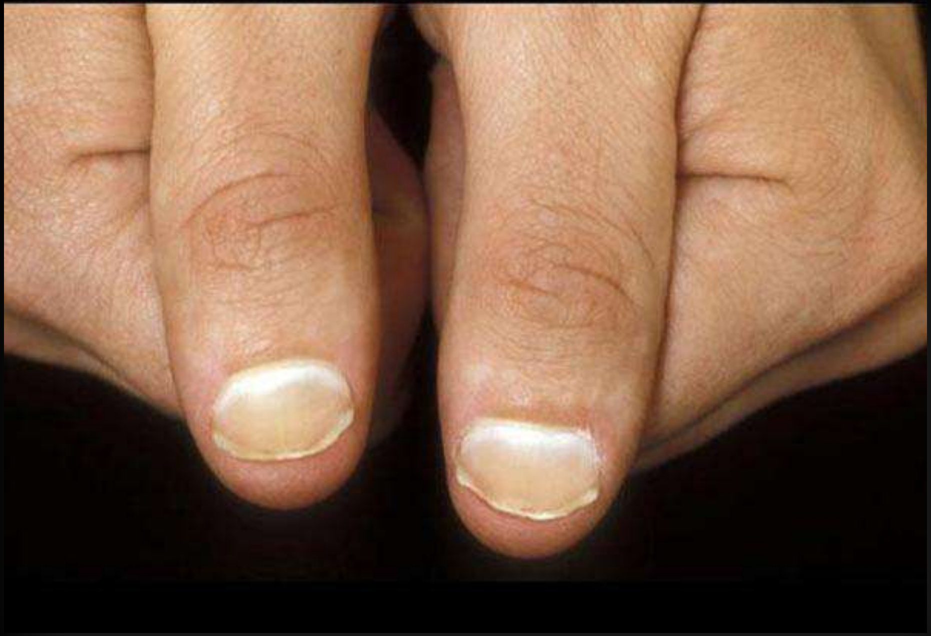
Clubbing and cyanosis
[cyanotic congenital heart diseases]

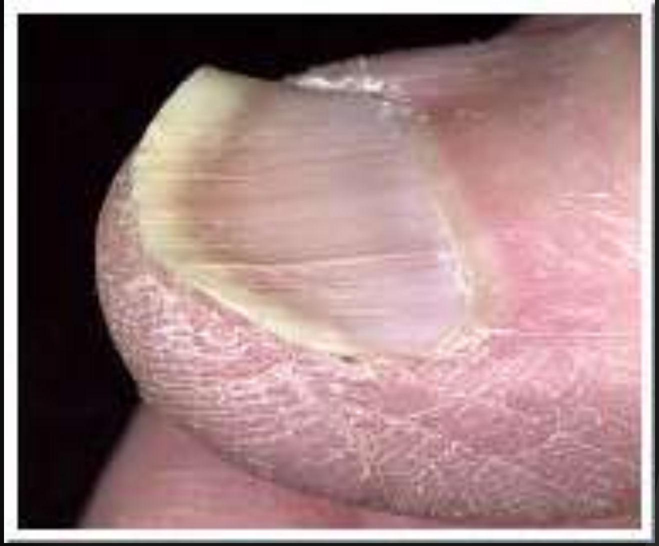


Clubbing
[bronchogenic cancer]

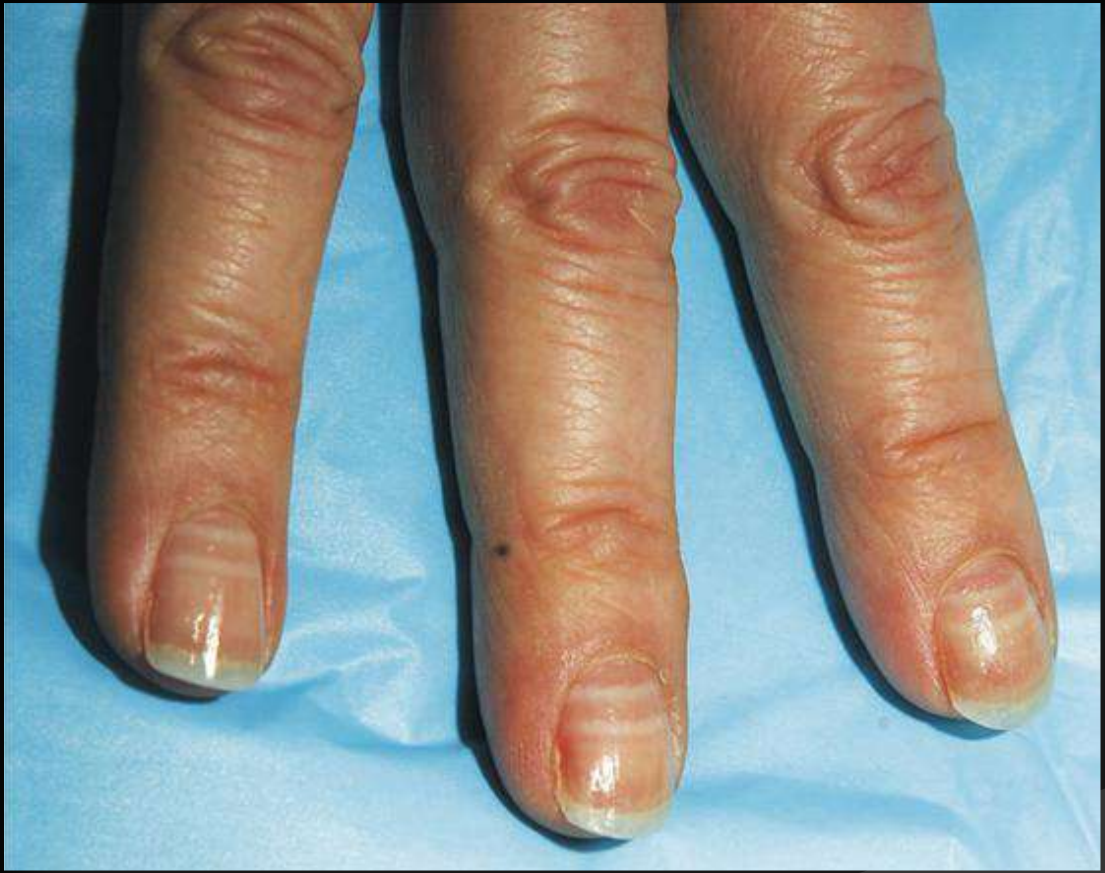


Koilonychia (spooning of nail)
[iron deficiency anemia]

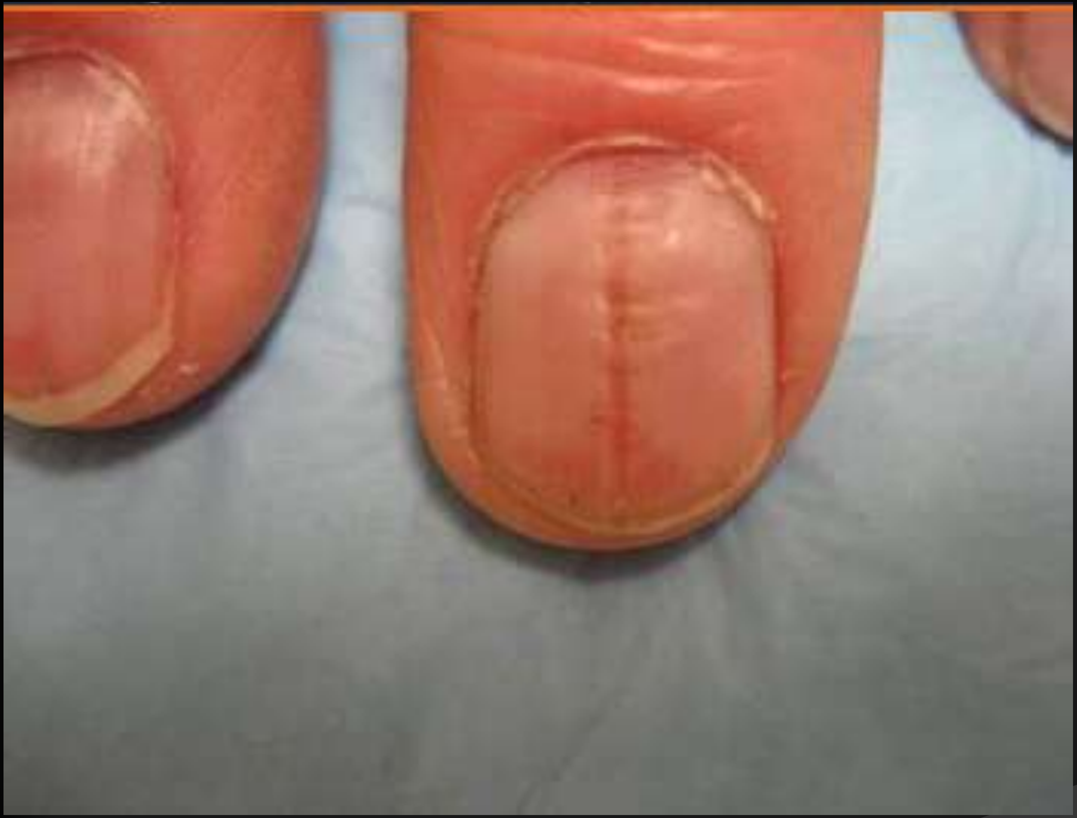




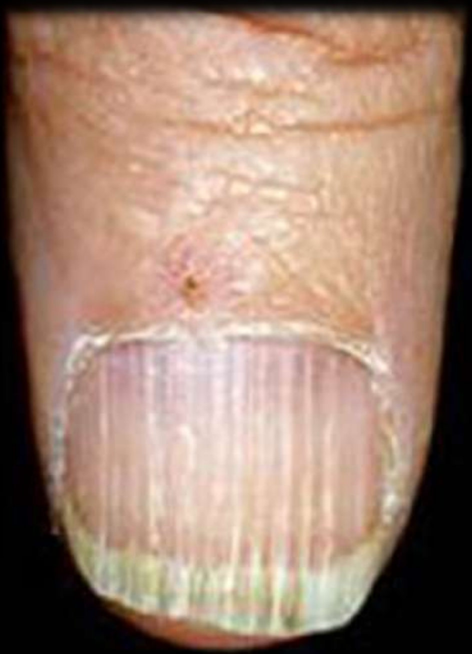
Beau's lines
[chemotherapy, transient medical illness]



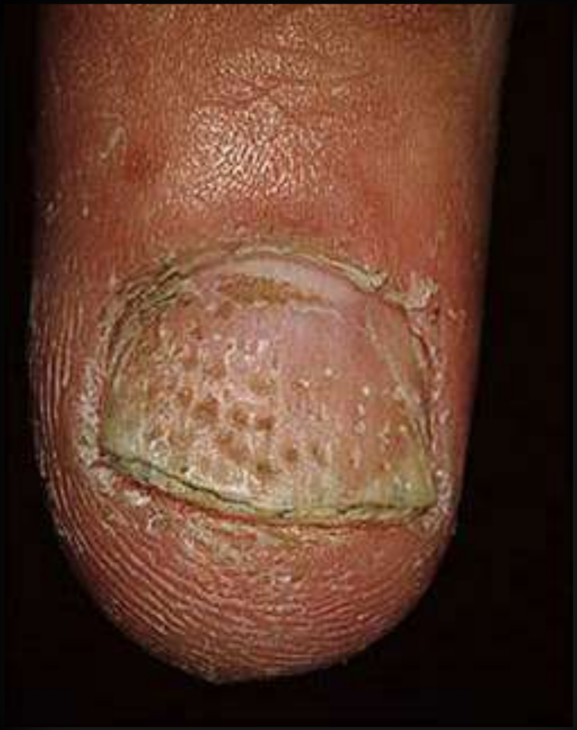
Central nail canal [peripheral vascular disease]



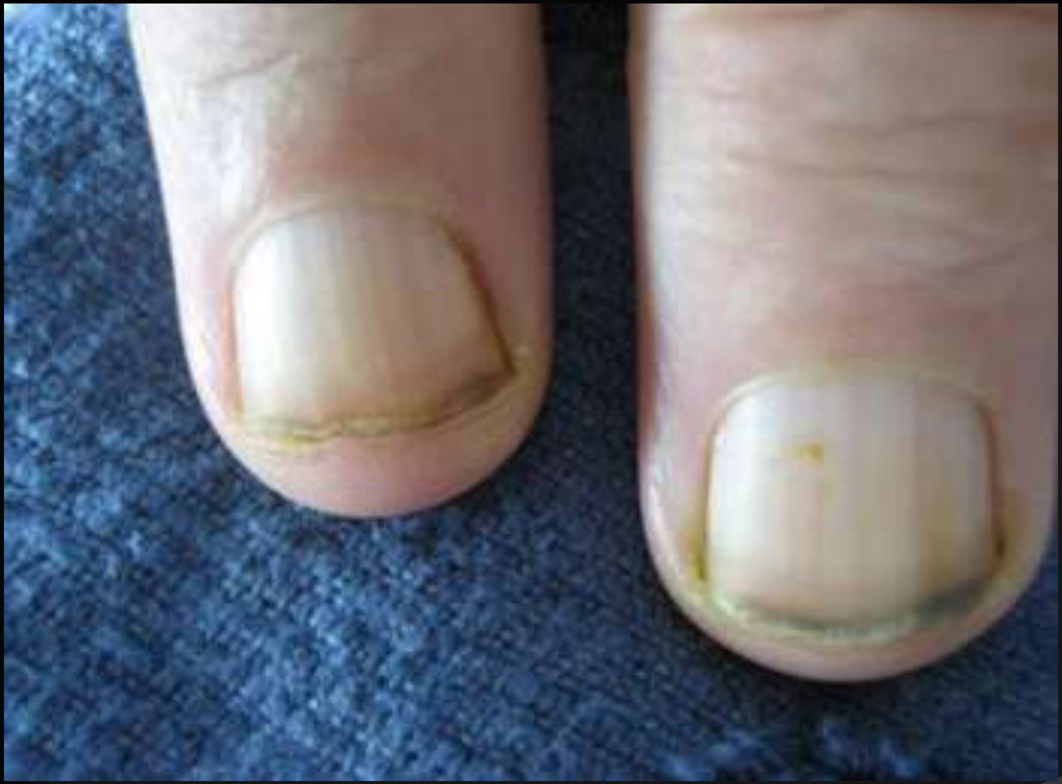
Nail beading
[DM, other endocrine disorders]



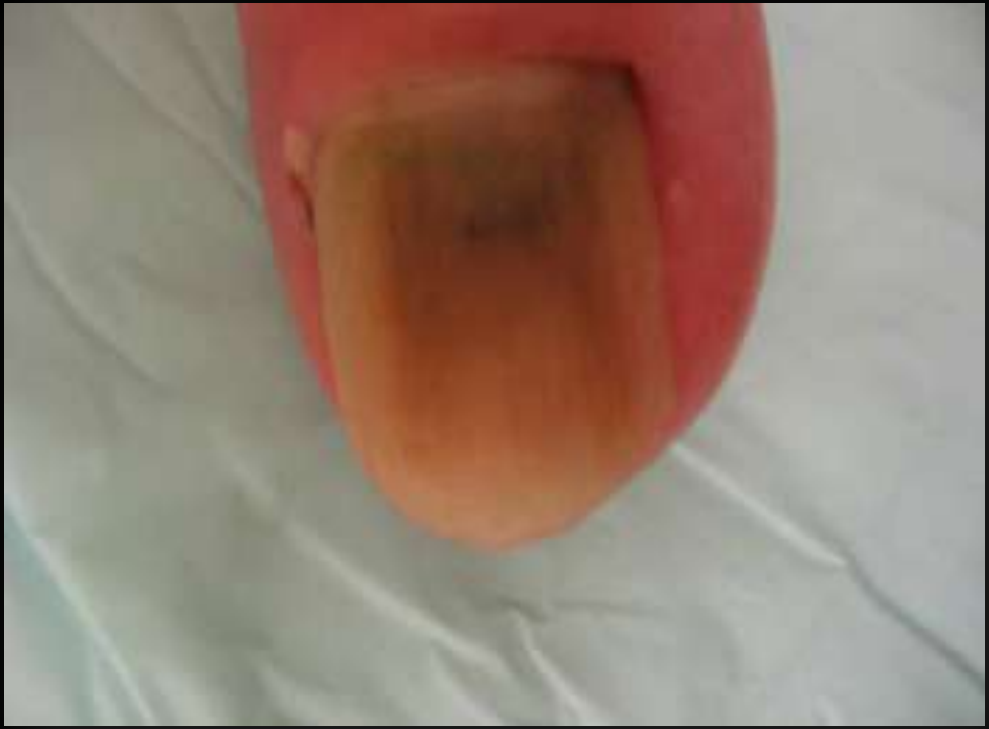
Nail pitting
[psoriasis]



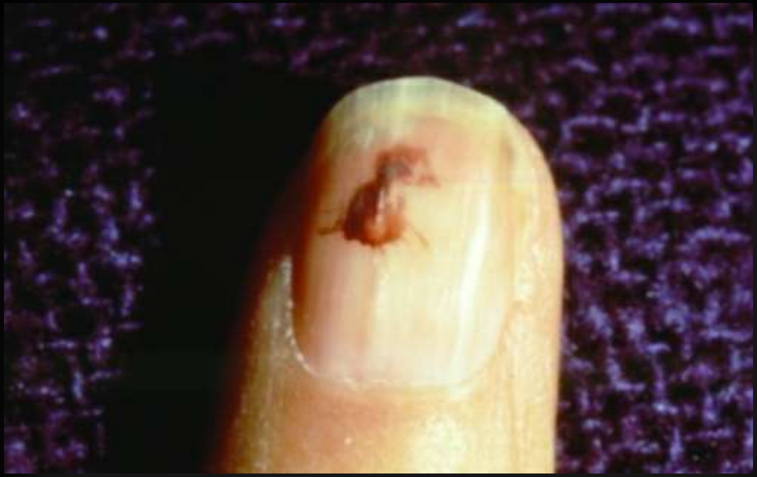
Leukonychia (white nail)
[liver cirrhosis, CRF]

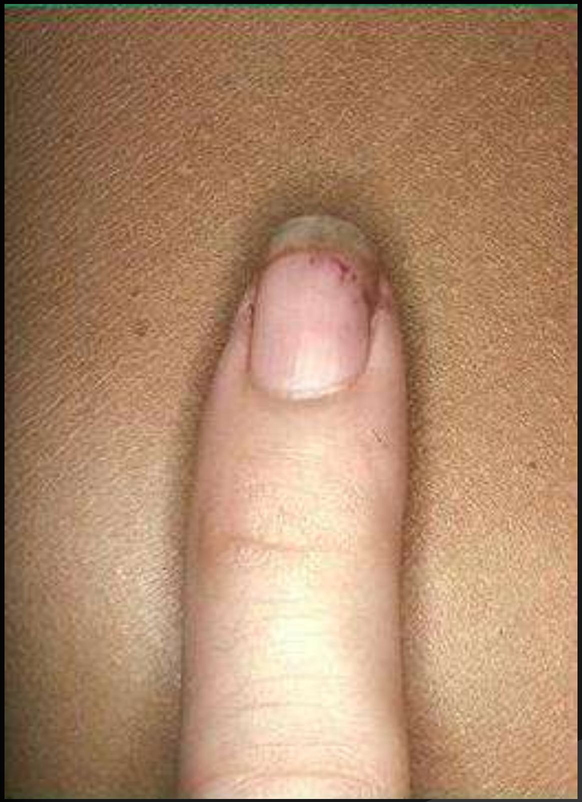


Yellow nail
[yellow nail syndrome]
(pleural effusion and bronchiectasis)

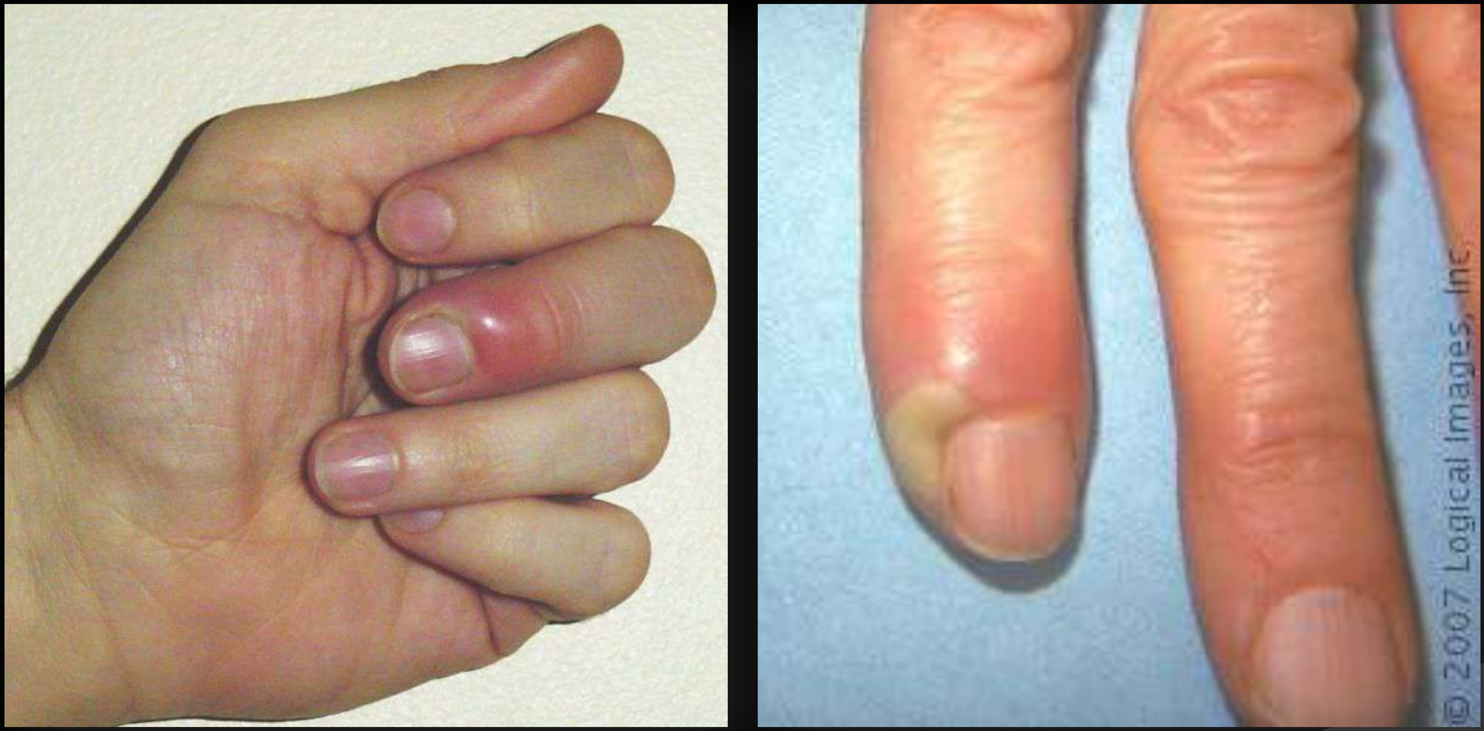


Splinter hemorrhage
[trauma, vasculitis, bacterial endocarditis]





Paronychia
[bacterial or fungal infection]



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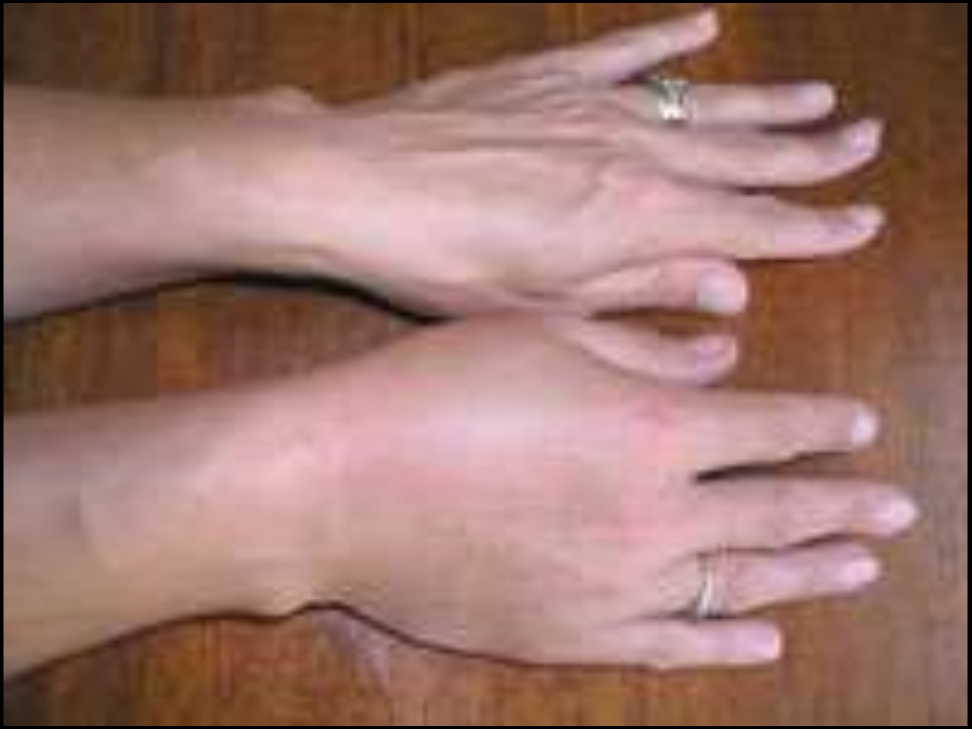
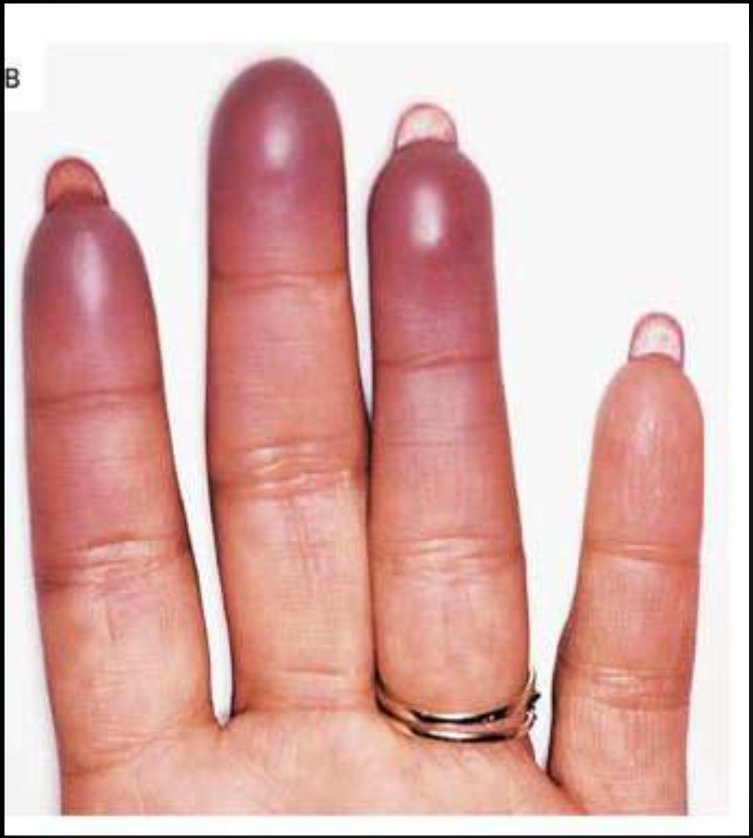
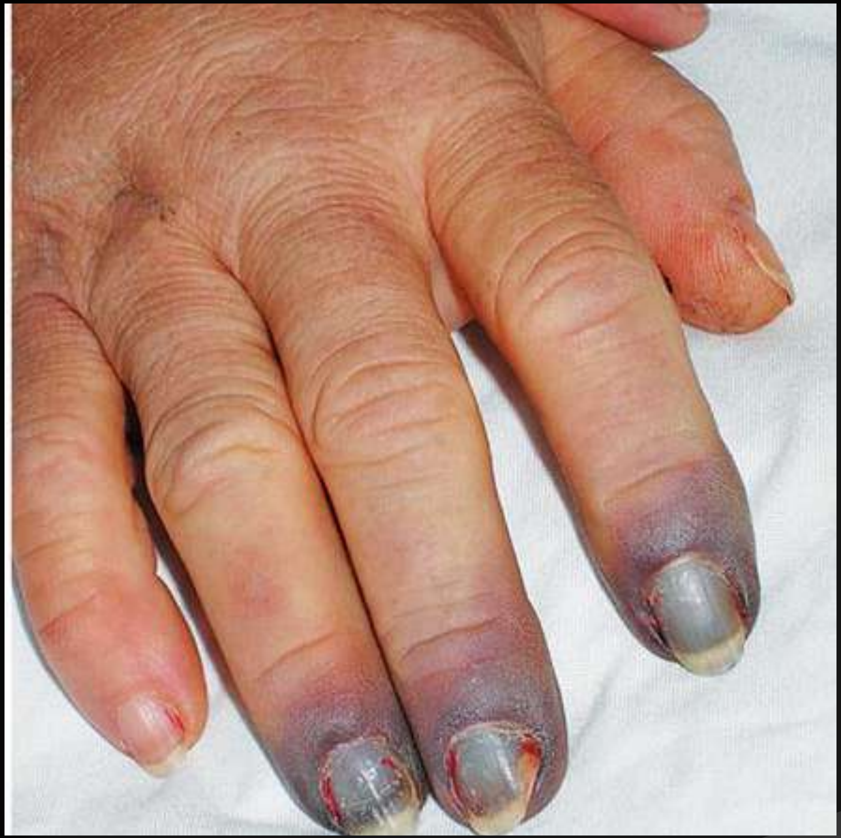
Swelling of the right hand
[angioedema, hereditary or IgE dependent]



Fingers cyanosis
[Raynaud's phenomena]

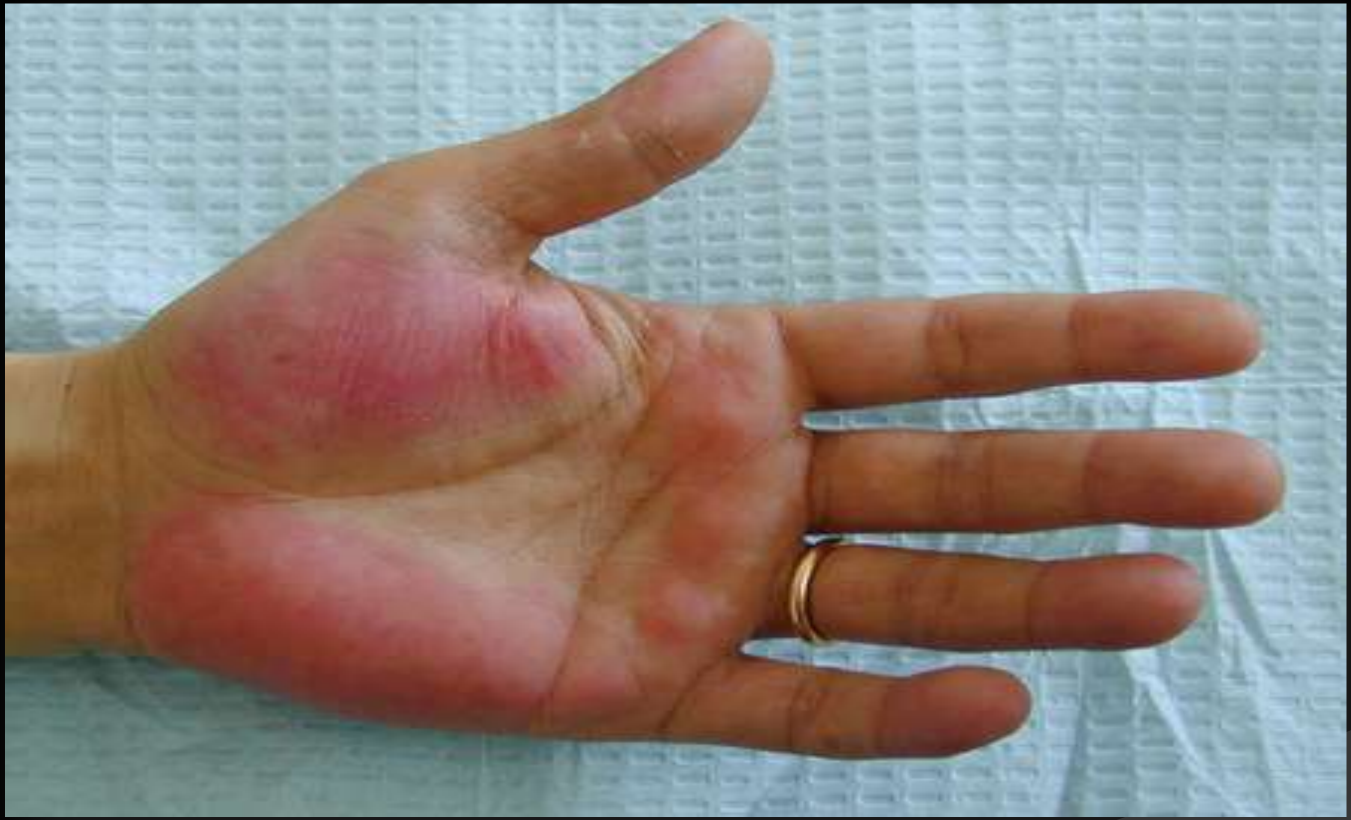


Digital infarction [Drugs, vasculitis, sever Raynaud's disease]



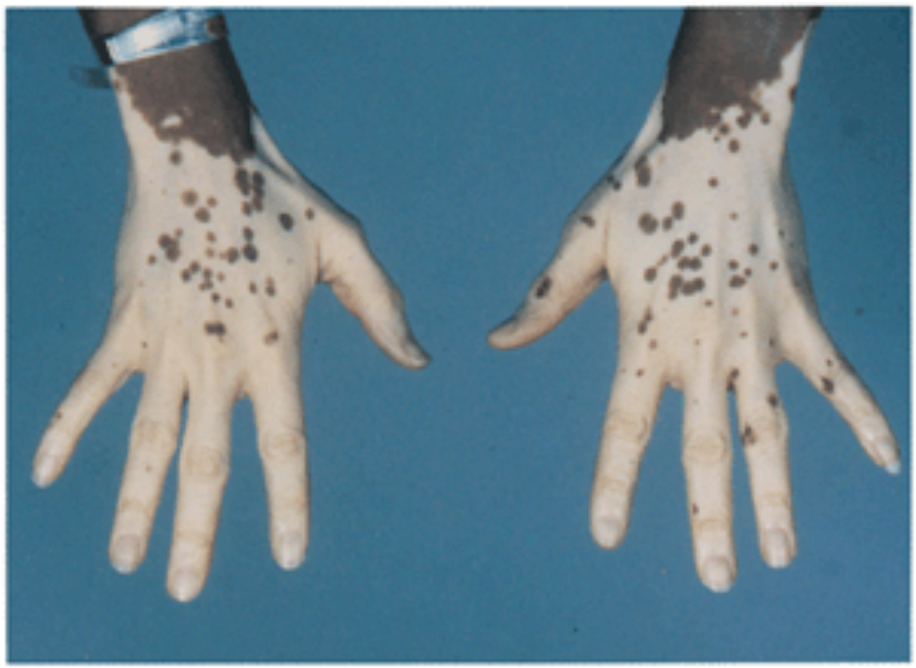
Palmar erythema

[liver disease, thyrotoxicosis, pregnancy and fever]

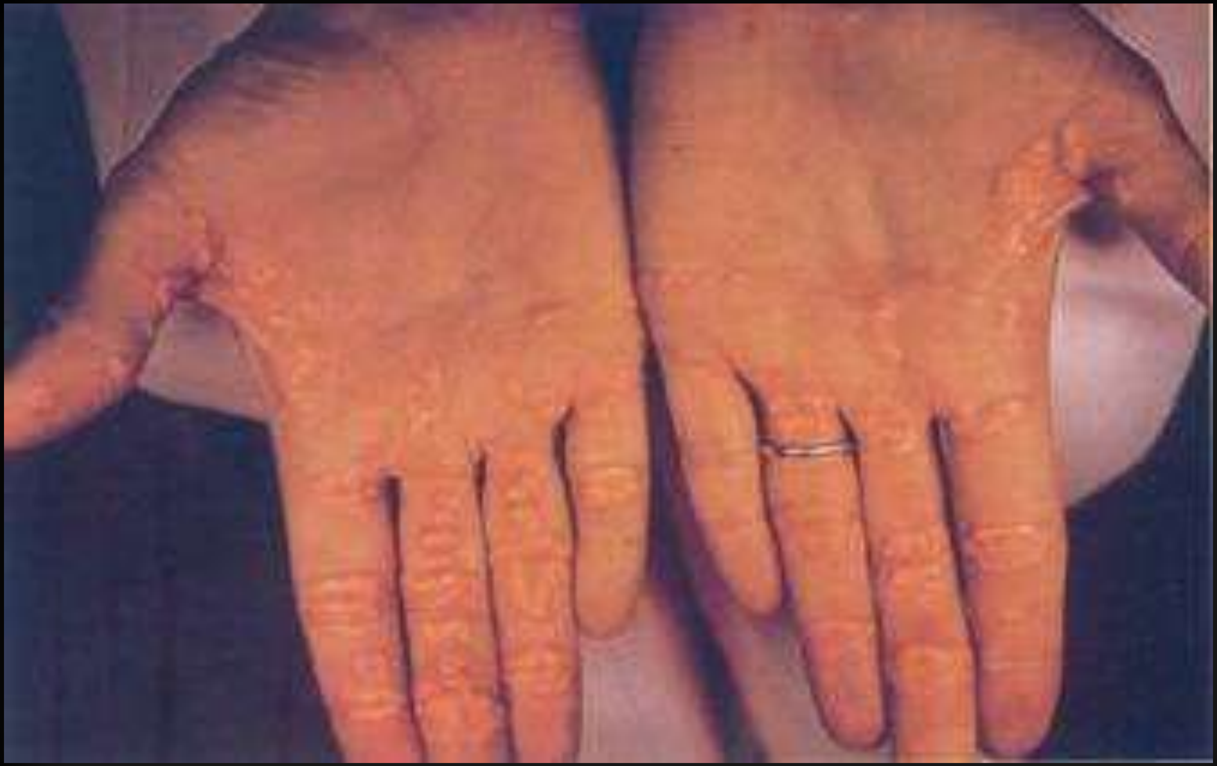


Depigmentation of skin

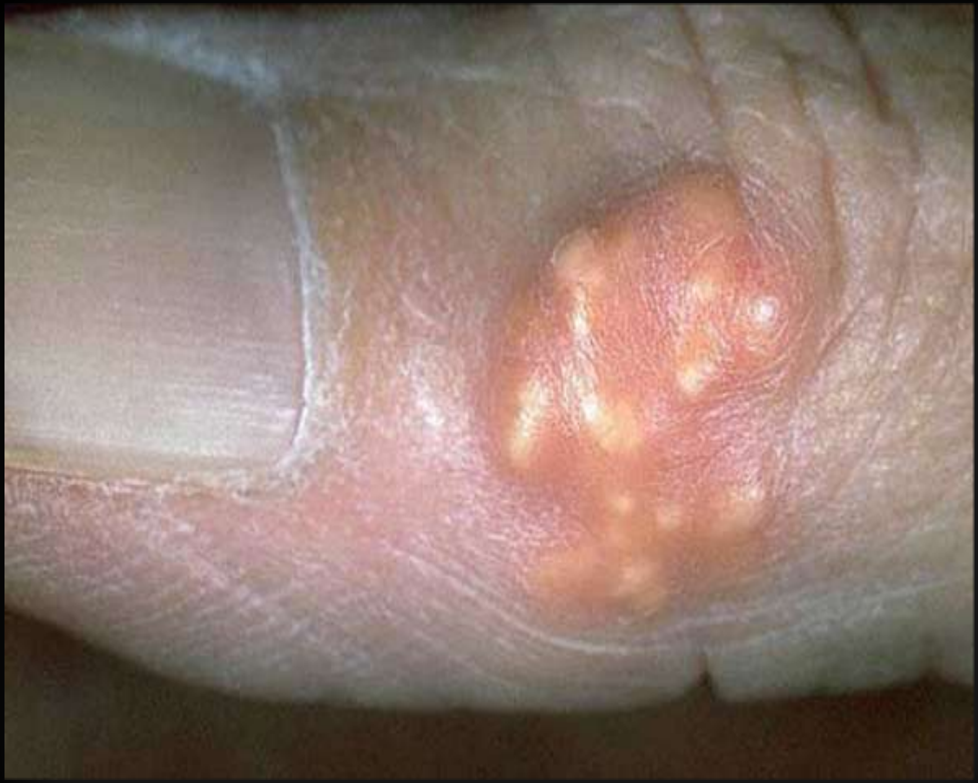
[vitiligo with possible associated autoimmune diseases]



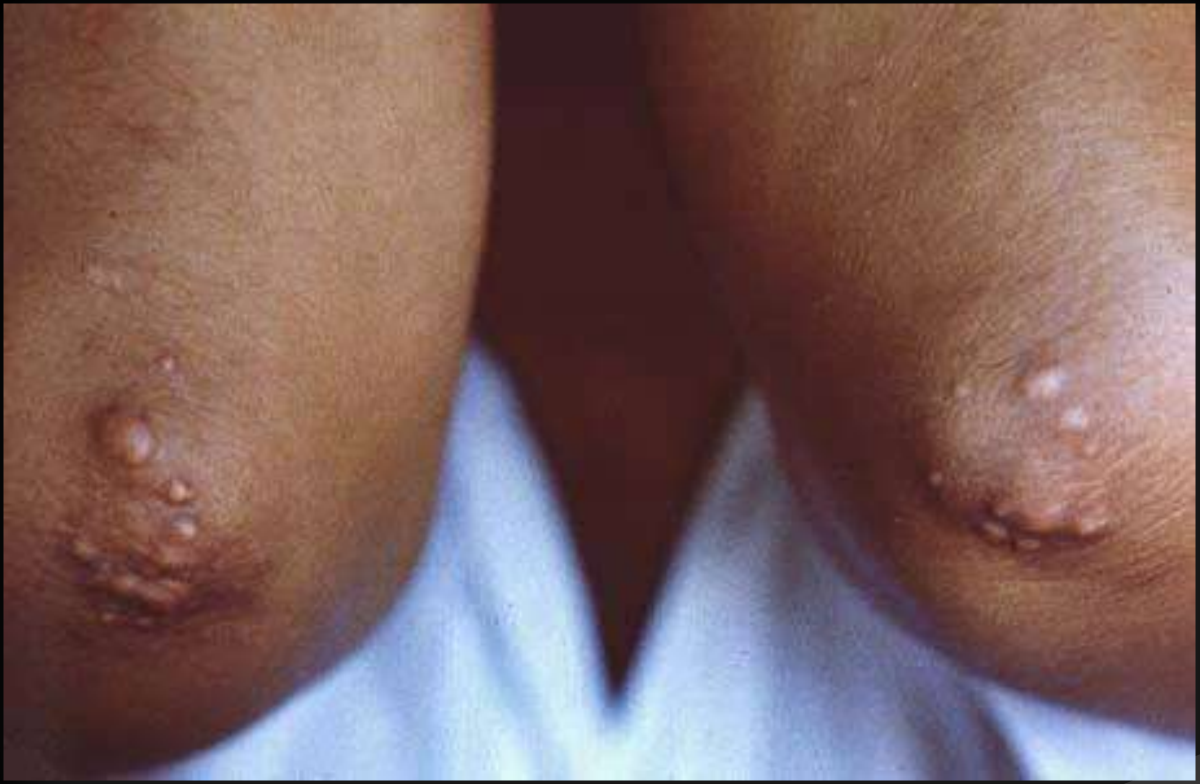
Palmar xanthoma
[familial hypercholesterolemia]



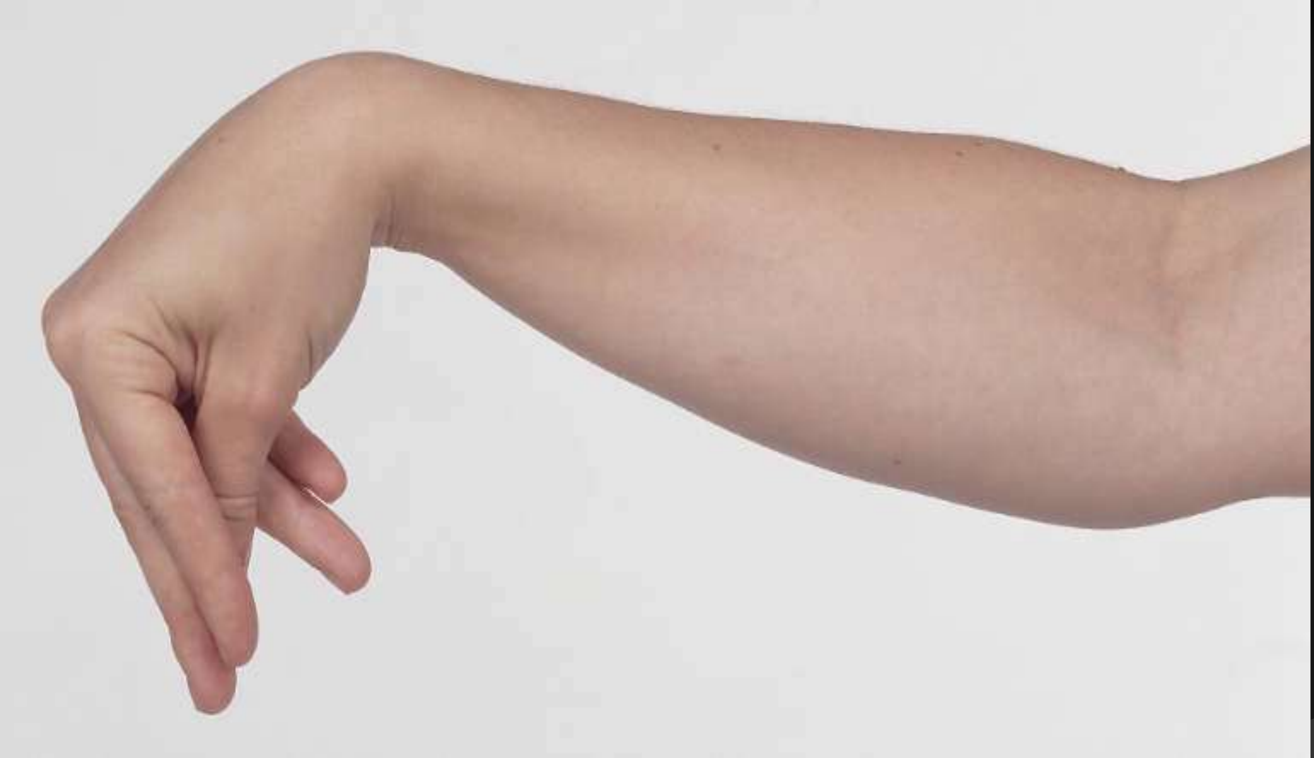
Tendon xanthoma of thumb [familial hypercholesterolemia]



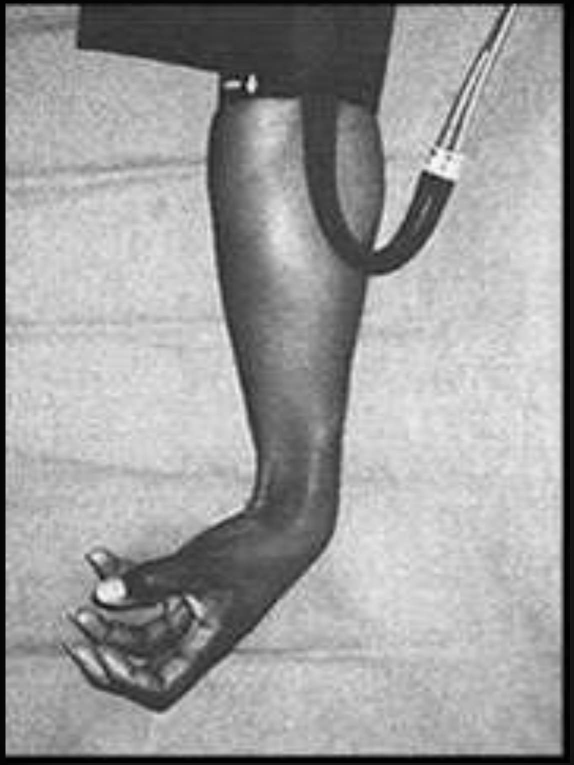
Tuberous xanthoma [familial hypercholesterolemia]



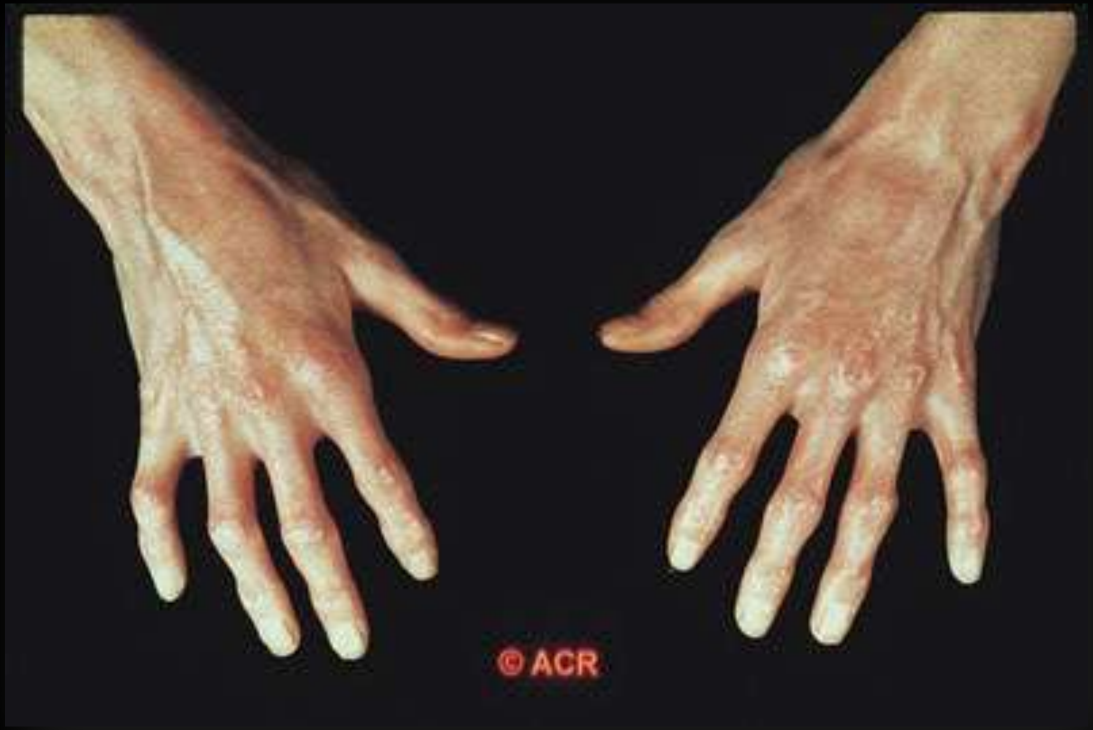
Carpal spasm [hypocalcaemia]



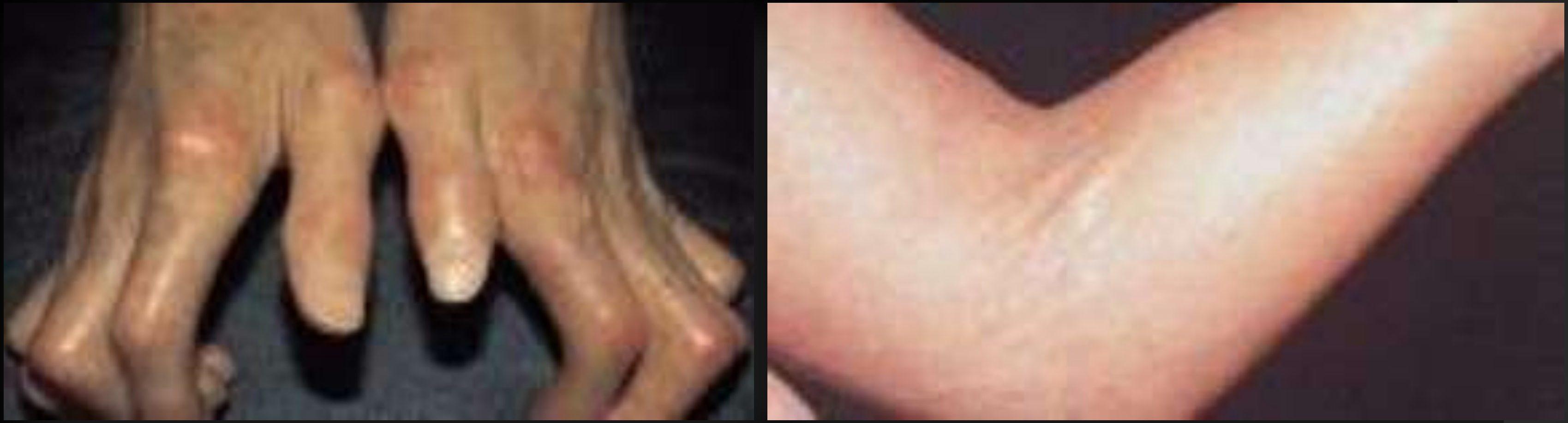
Trousseau's sign
[hypocalcaemia]



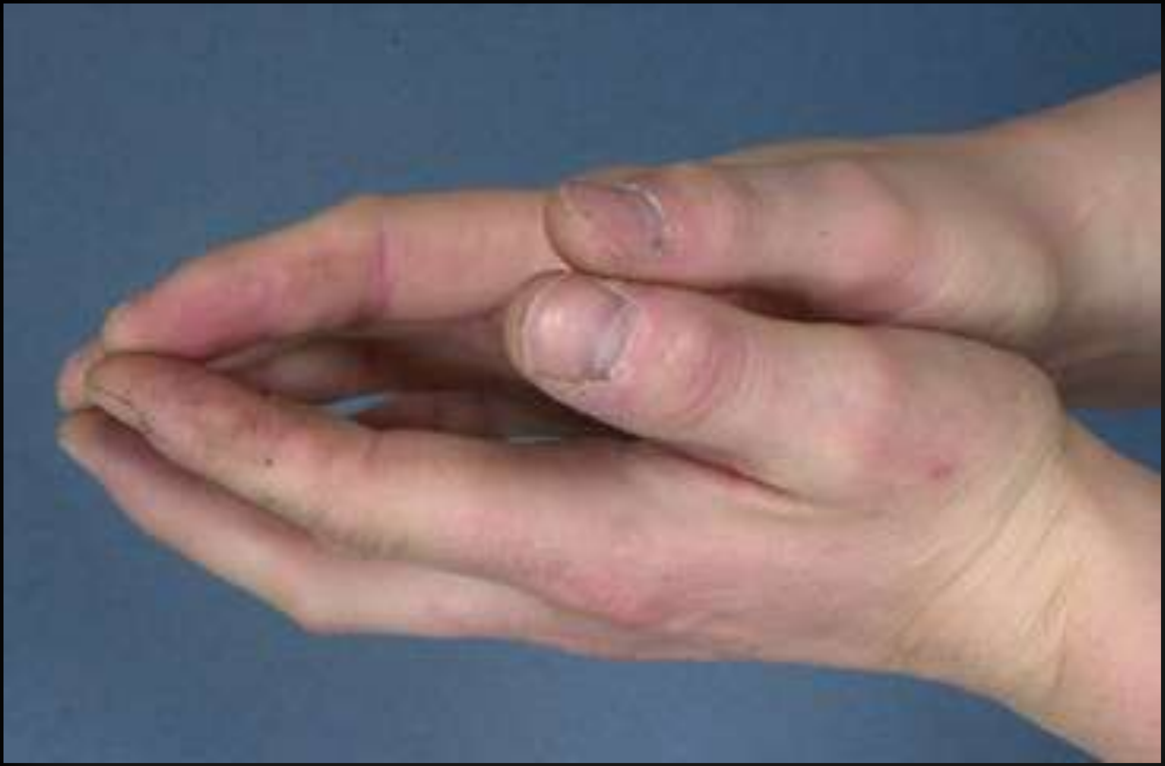
Thick tight skin
[scleroderma]



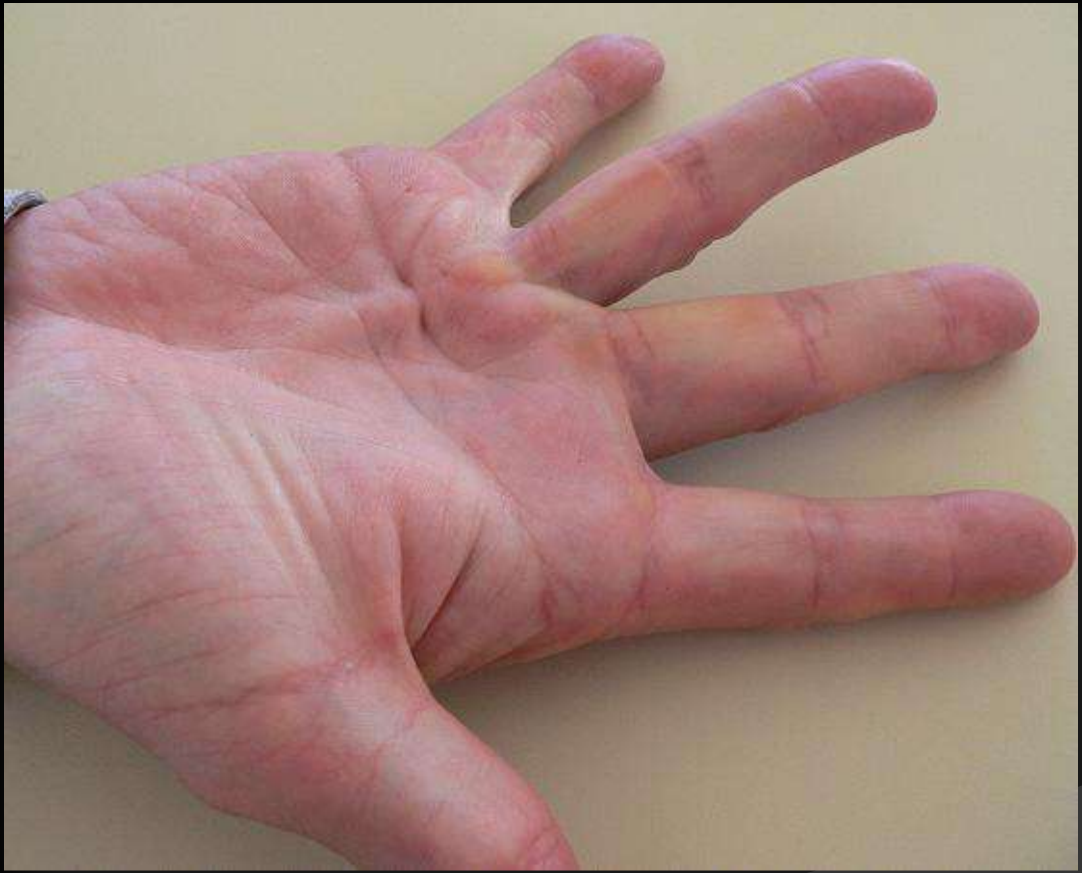
Flexion contractures
[scleroderma]



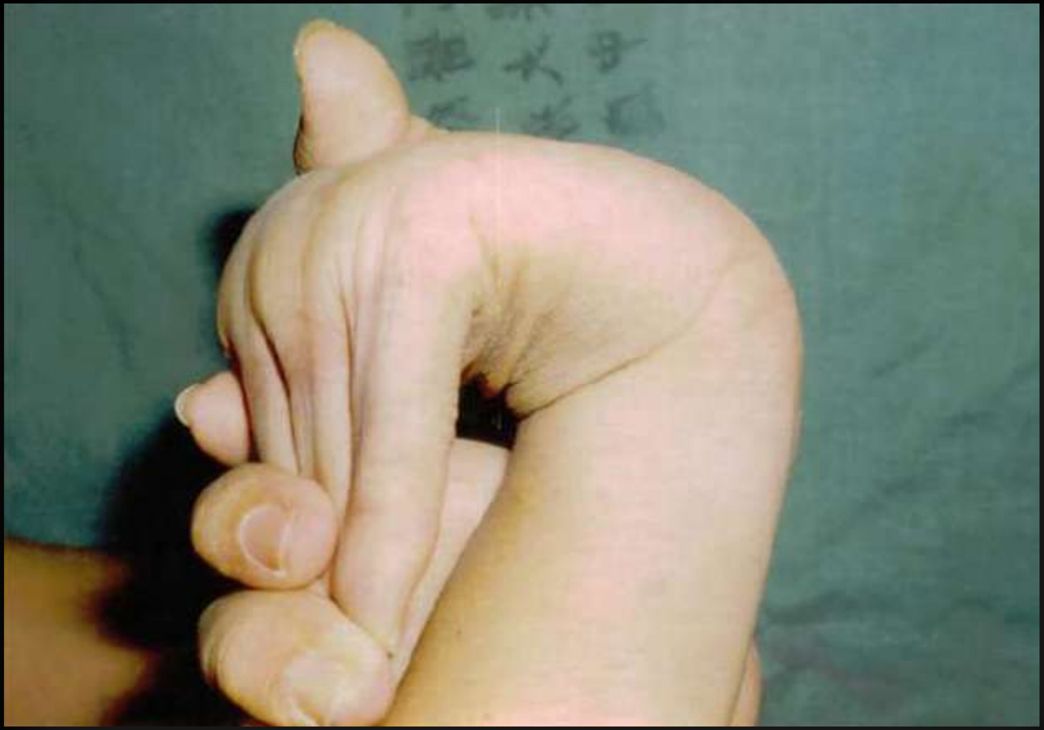
Limited extension of fingers [scleroderma, DM]



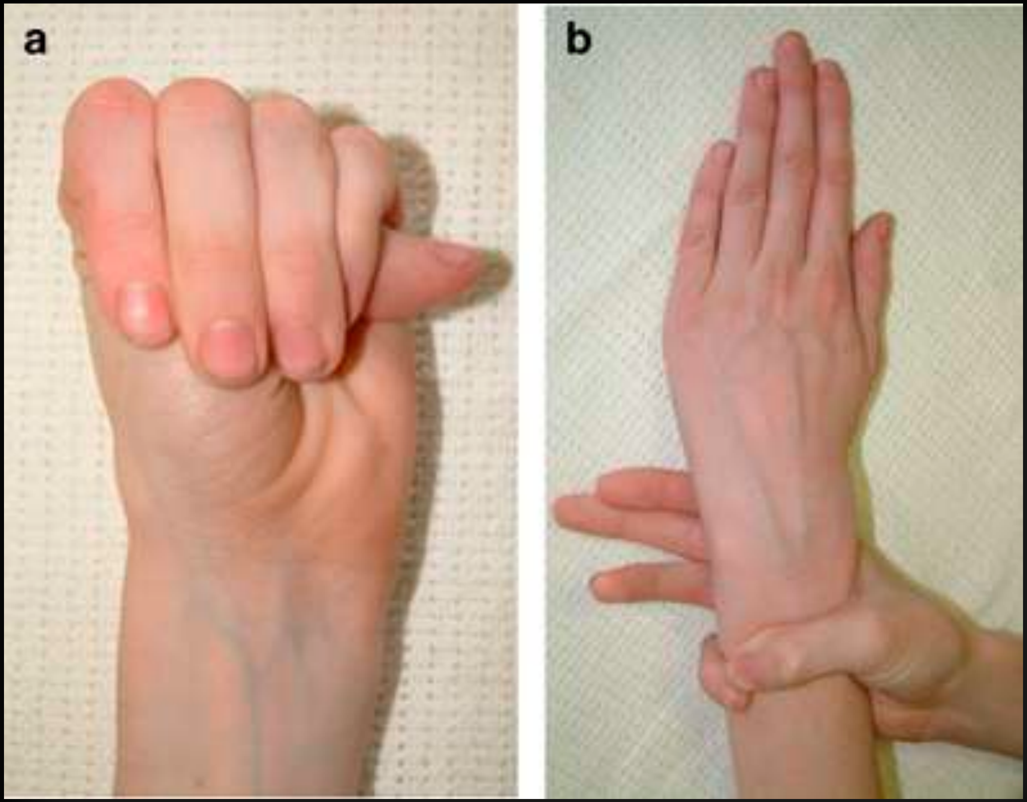
Dupuytren's contracture
[alcoholic liver disease, DM, idiopathic fibrosis]



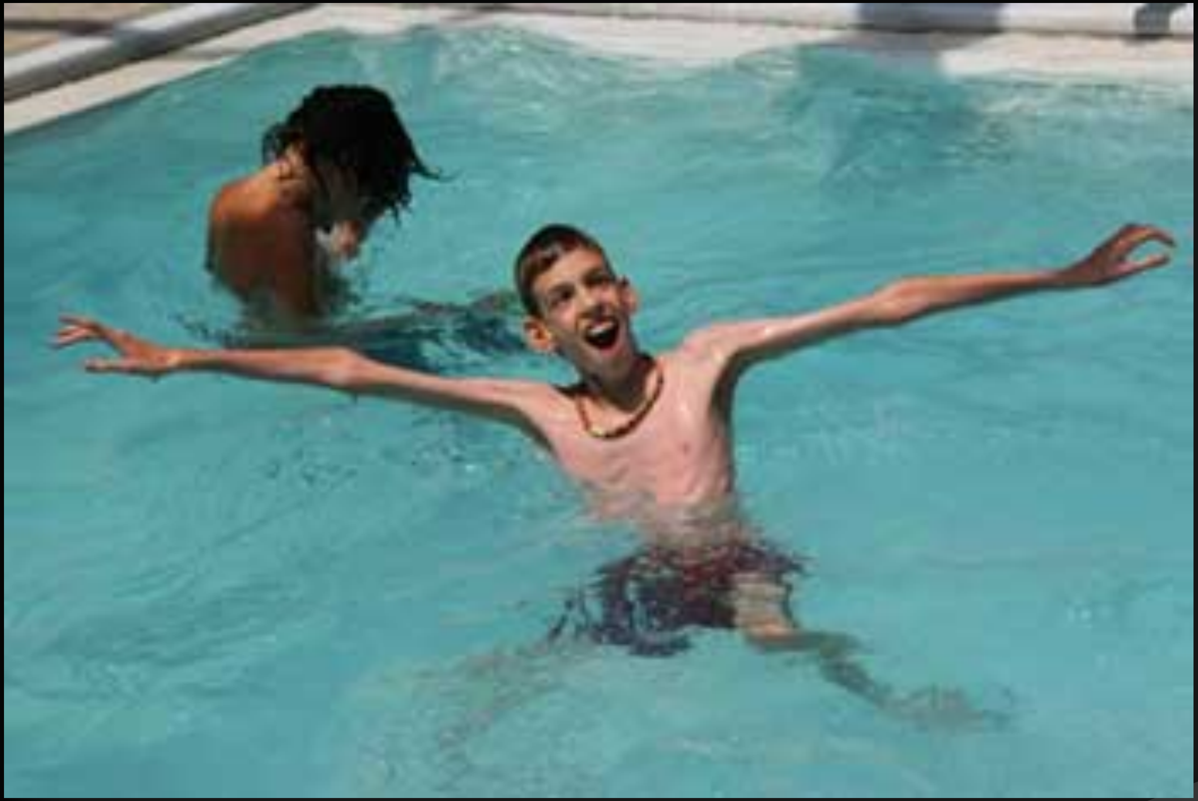
Hypermobility of the joints
[Ehlers - Danlos syndrome]



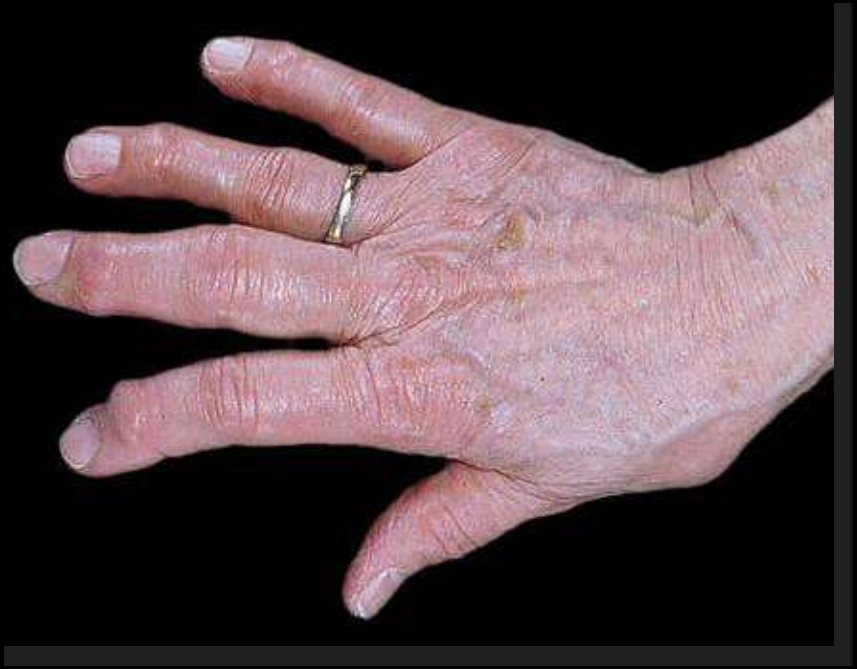
Long fingers (arachnodactyly)
[Marfan syndrome]



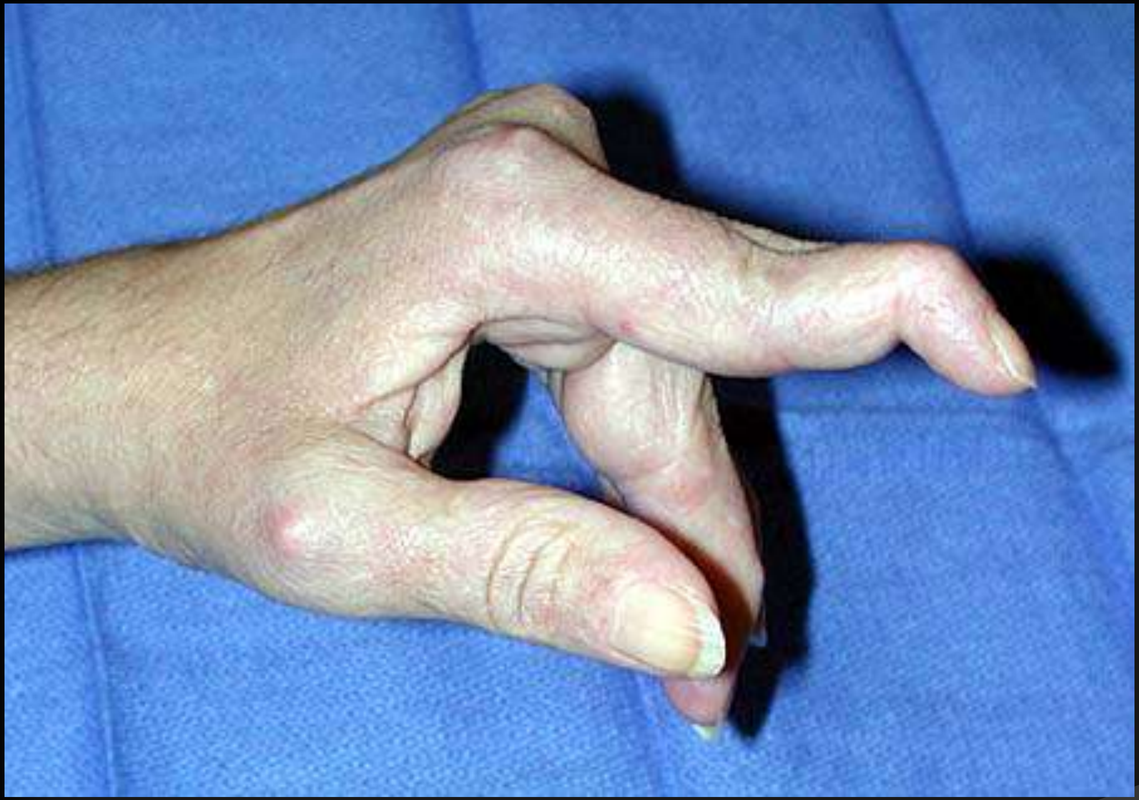
Long arm span
[Marfan syndrome]



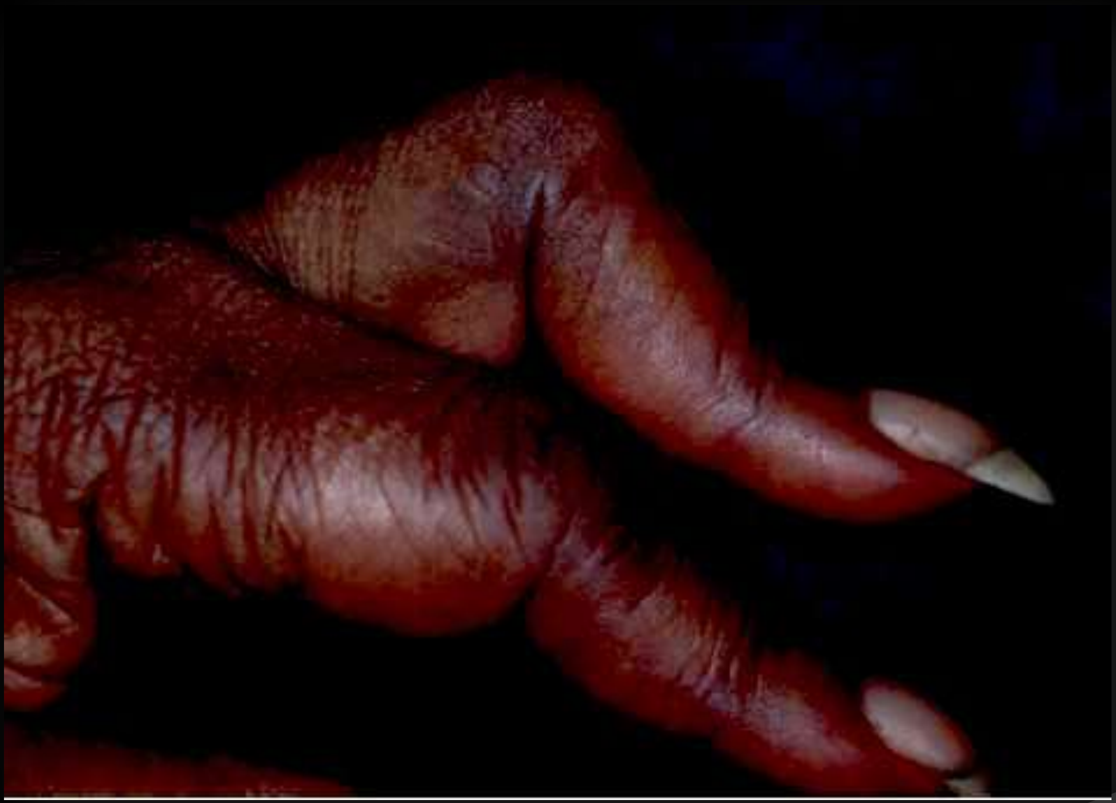
Heberden's nodes [osteoarthritis]



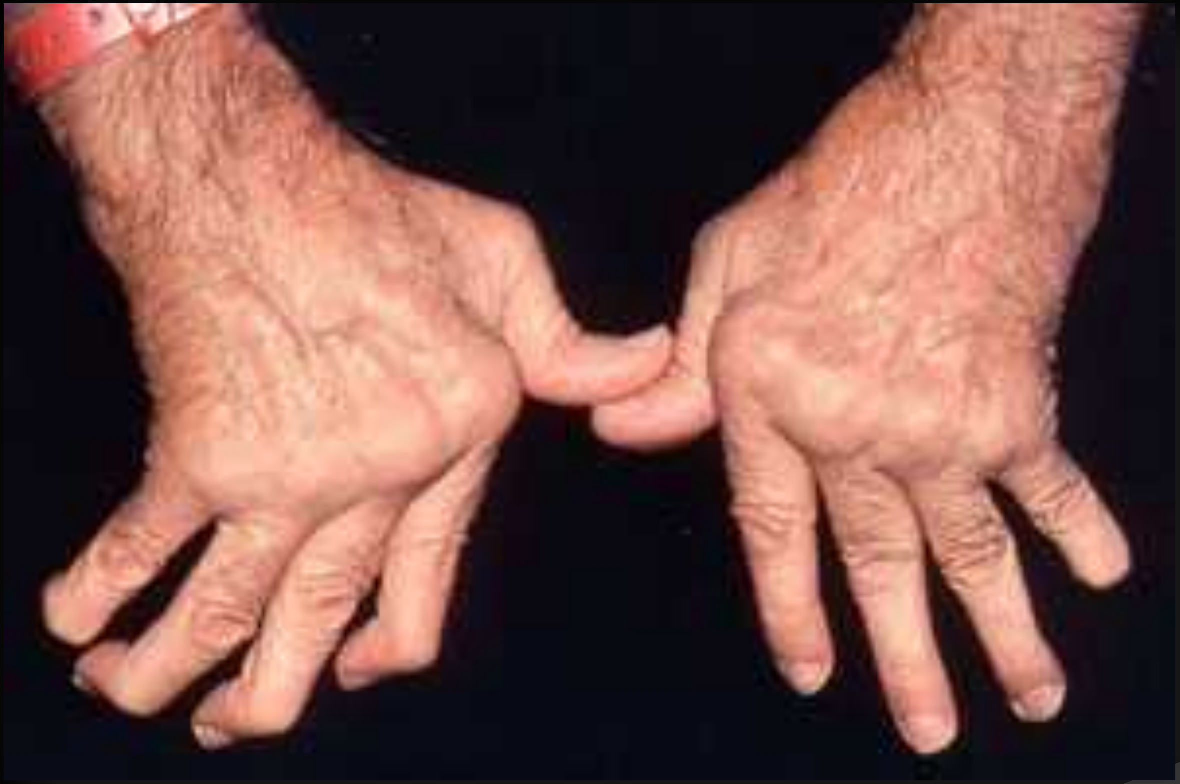
Swan neck deformity [rheumatoid arthritis]



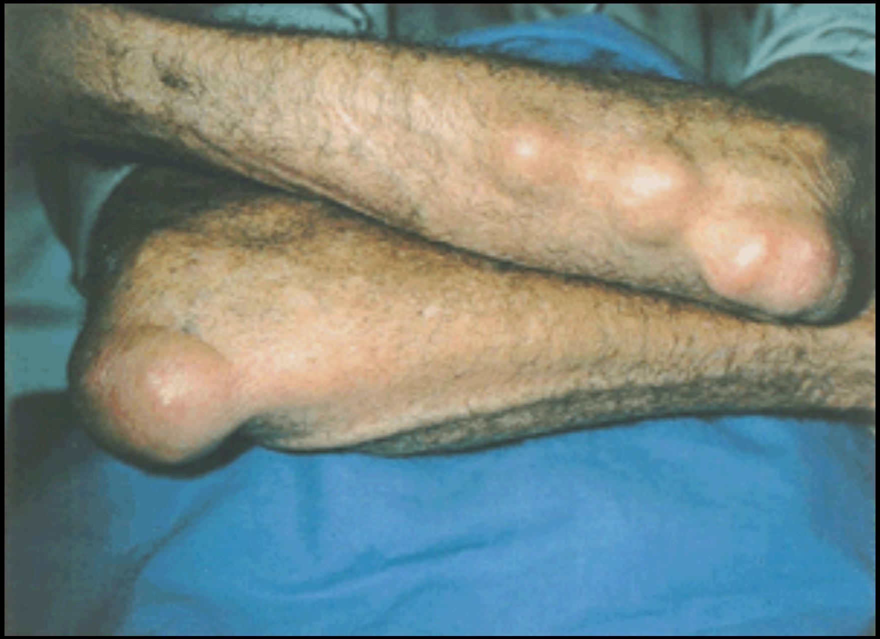
Boutonniere deformity
[rheumatoid arthritis]



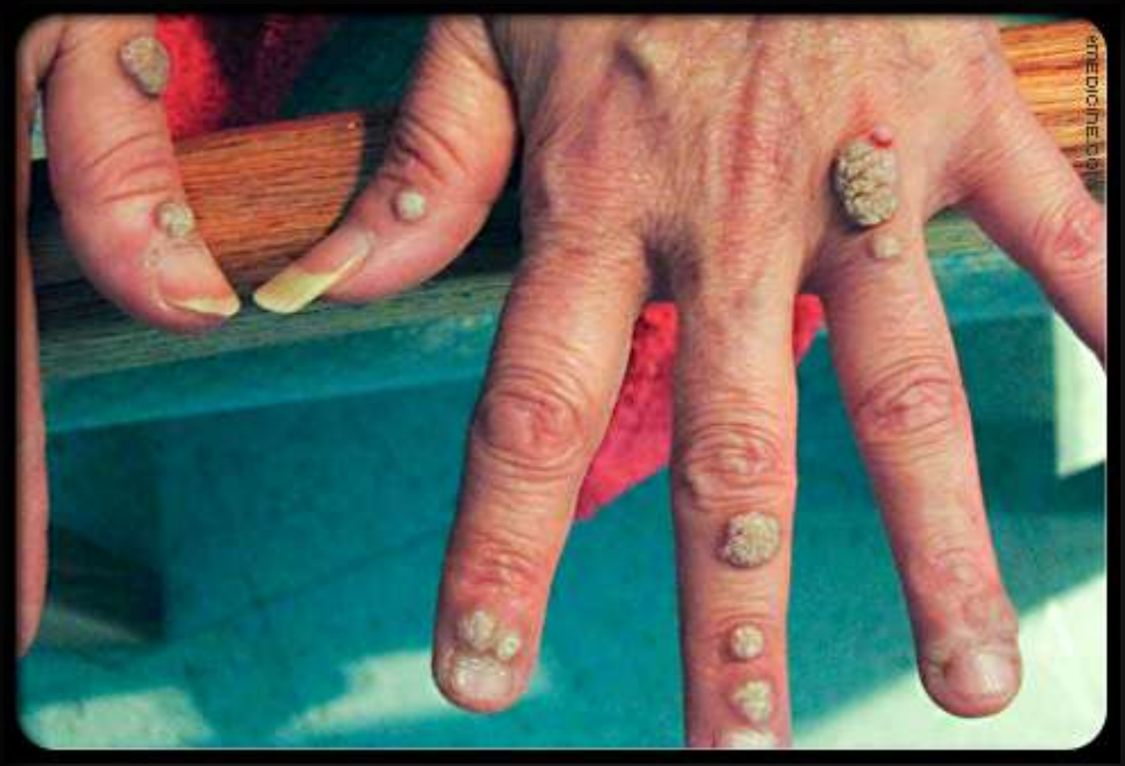
Z-deformity of the thumb [rheumatoid arthritis]



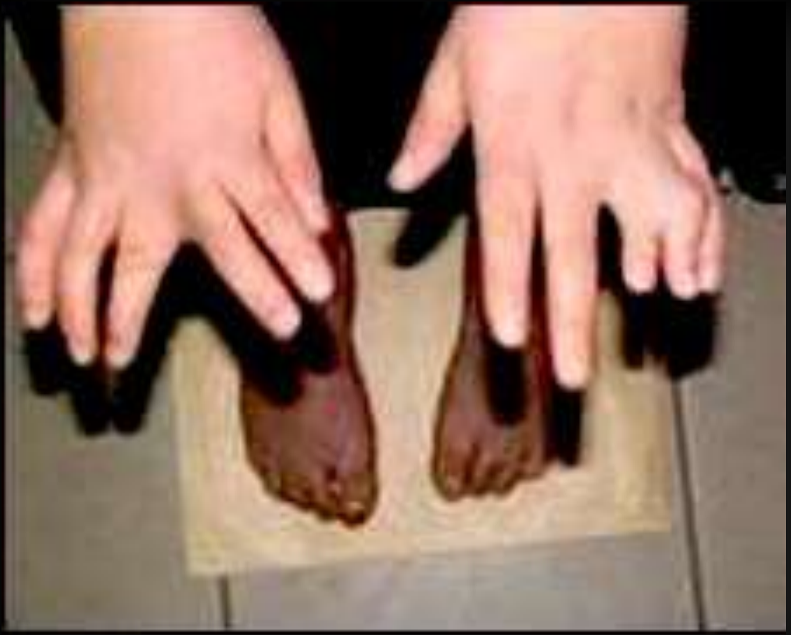
Rheumatoid nodule
[rheumatoid arthritis]



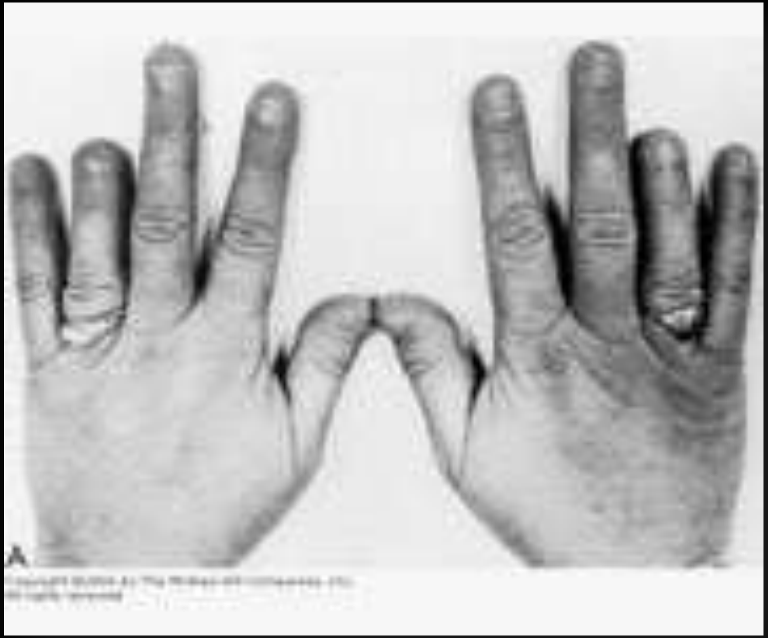
Warts
[Papillomavirus infection]



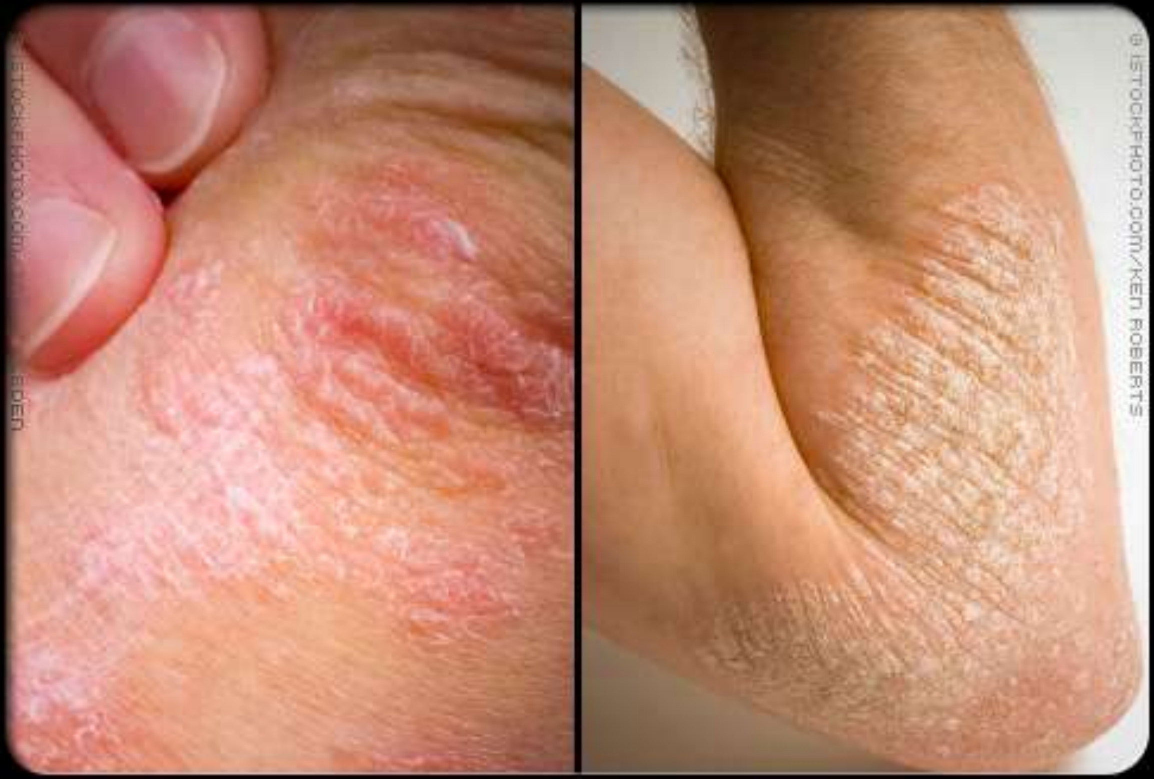
Extradactyly and syndactyly [Laurence –Moon- Biedl syndrome]



Short fourth metacarpal bone [Pseudohypoparathyroidism]



Erythematous plaques with adherent silvery scale. [psoriasis]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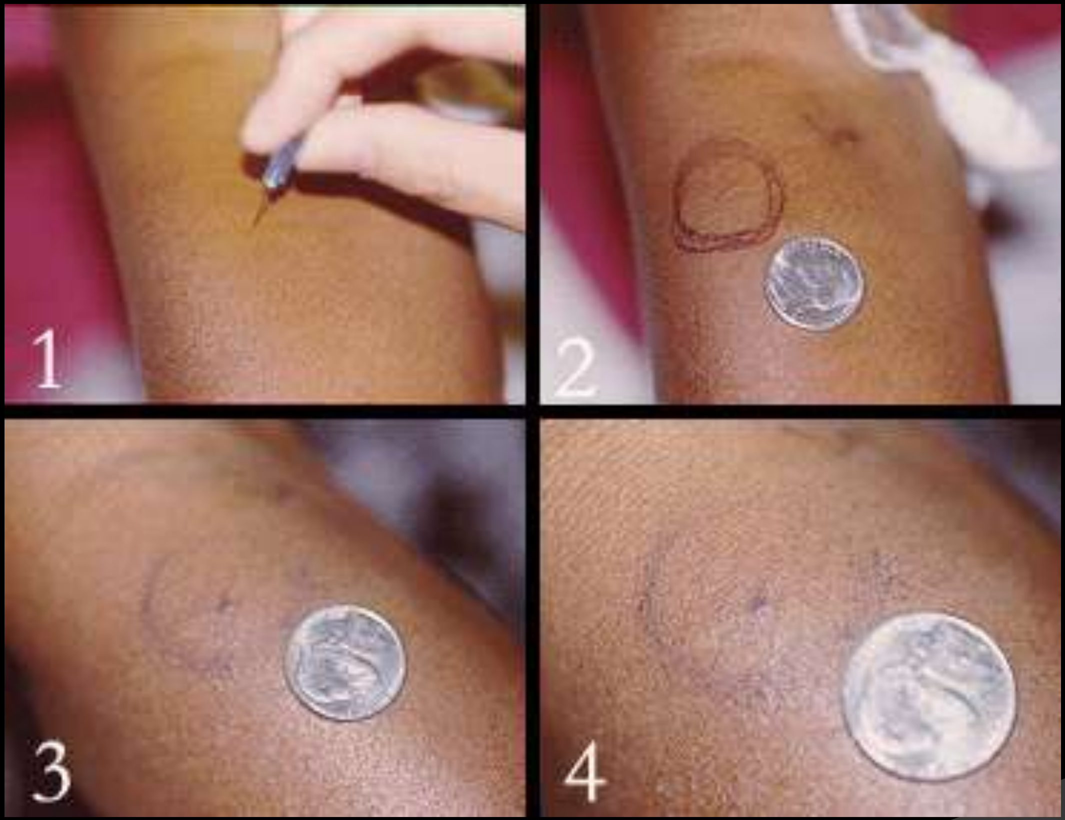
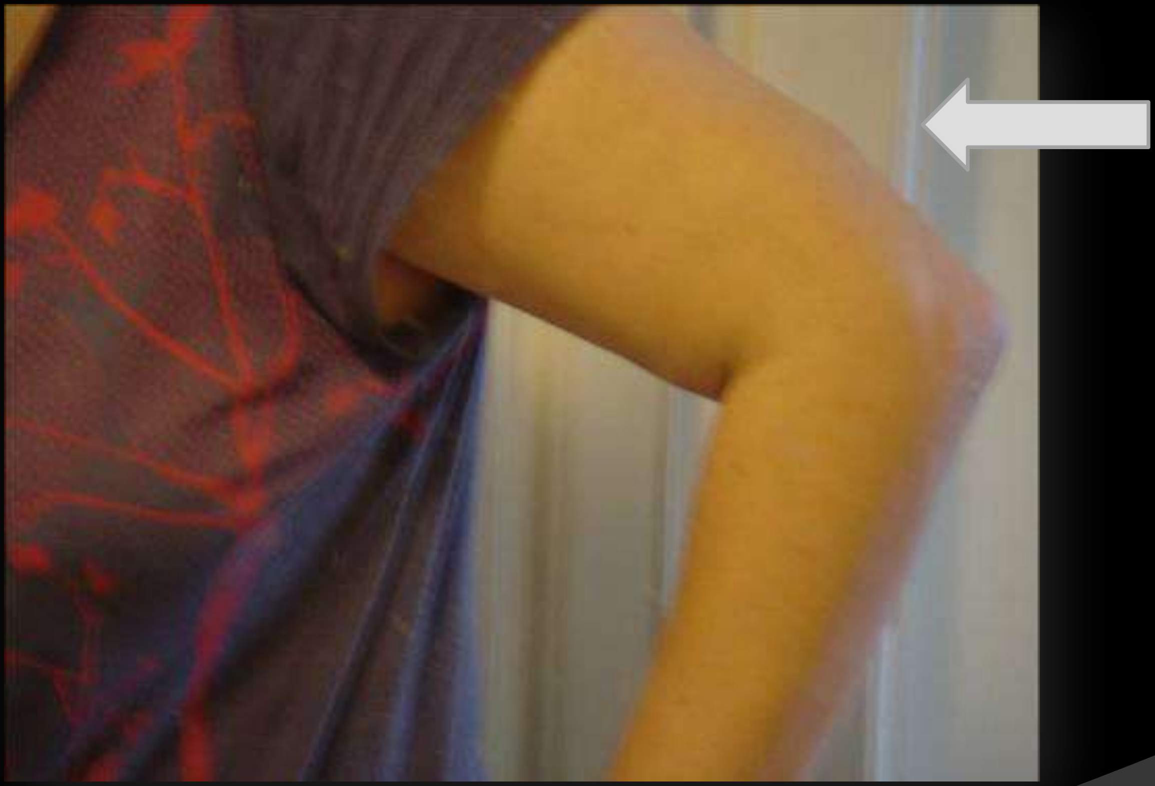
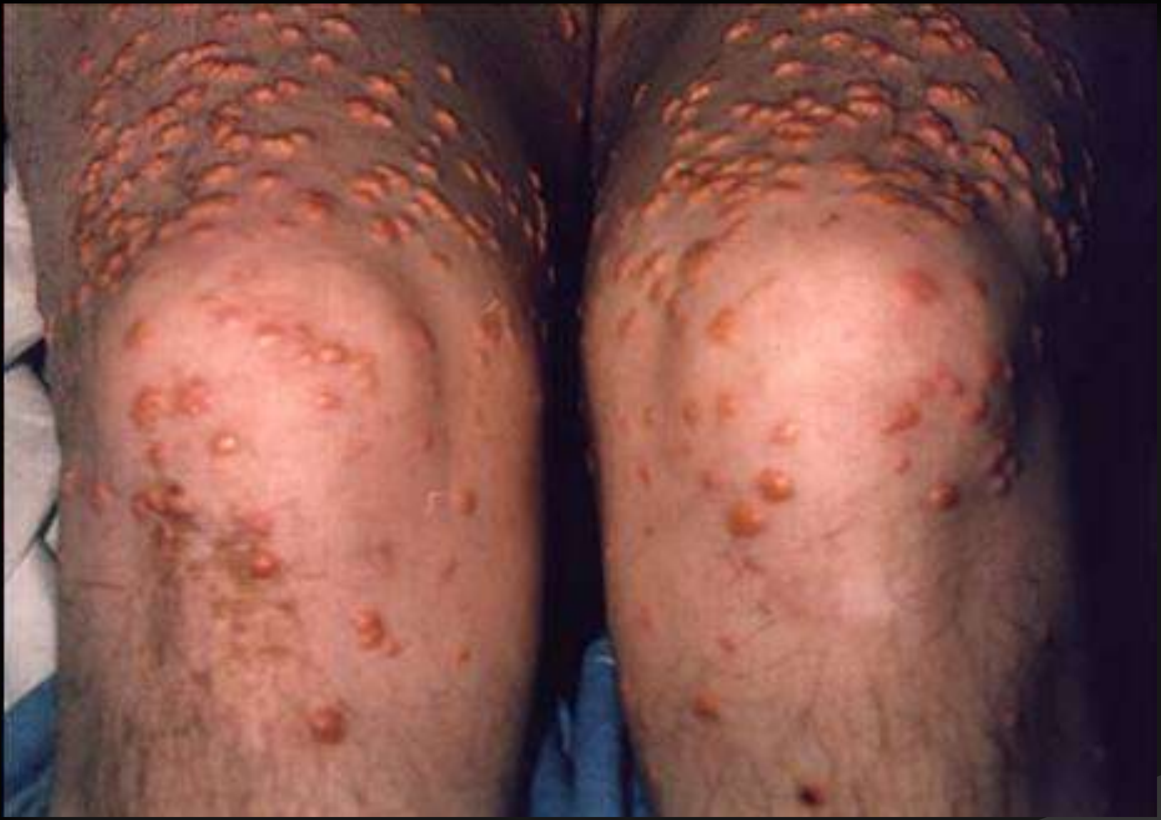
Pathergy test
[Behçet's disease]



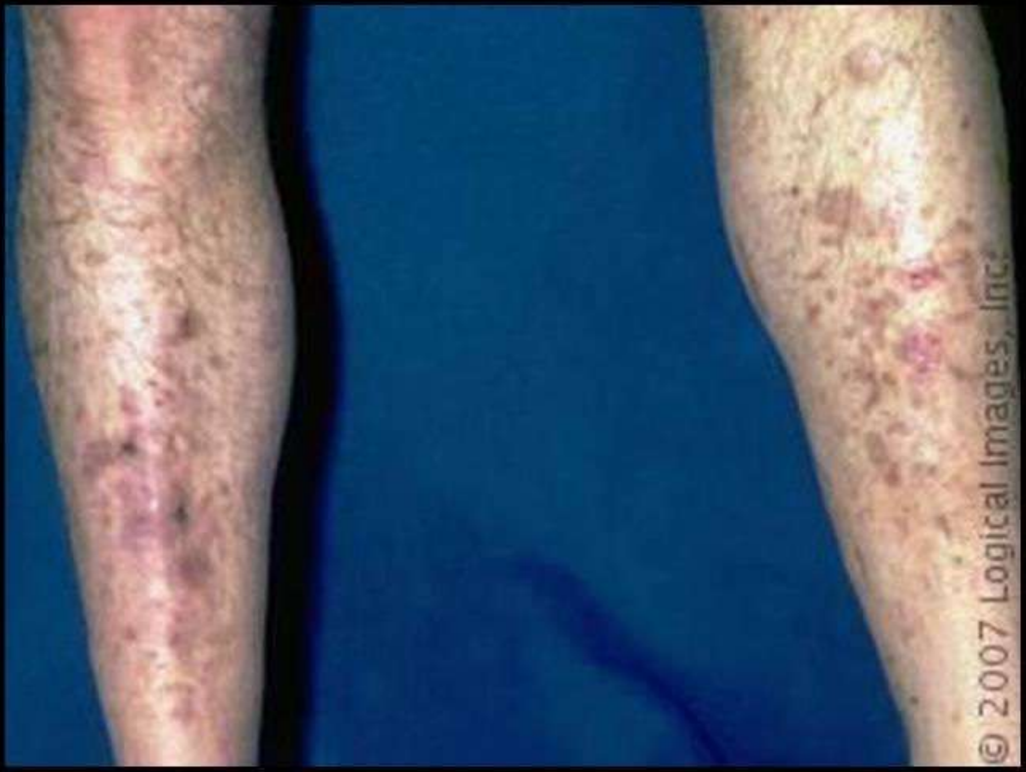
Lipodystrophy
[insulin therapy]



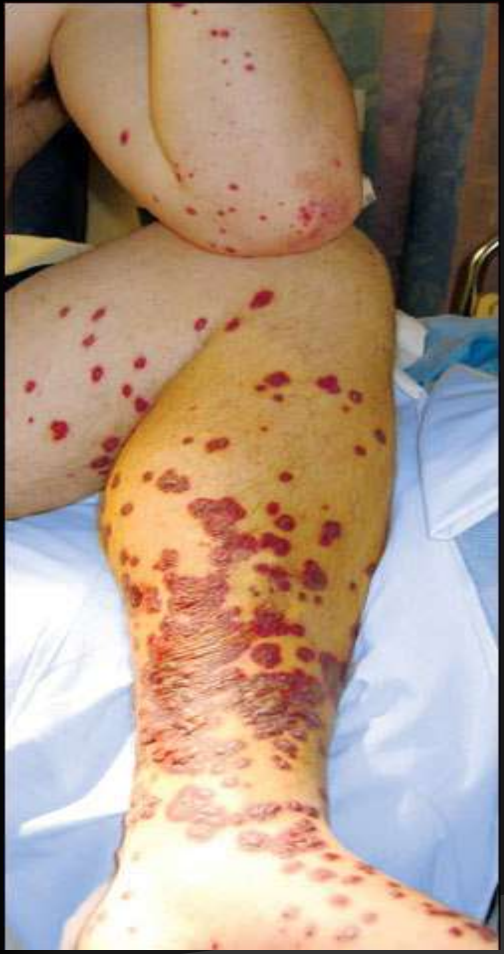
Eruptive xanthoma
[hypertriglyceridemia]



Hyperpigmented lesions [diabetic dermopathy]

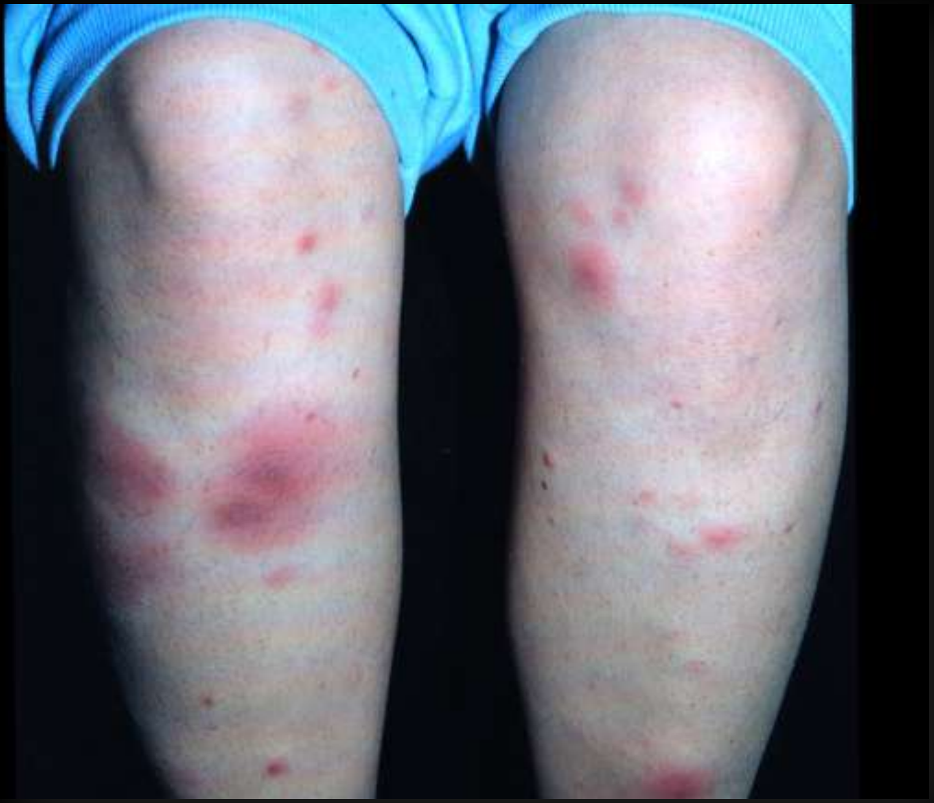


Purpura
[thrombocytopenia, Henoch-Schönlein purpura]

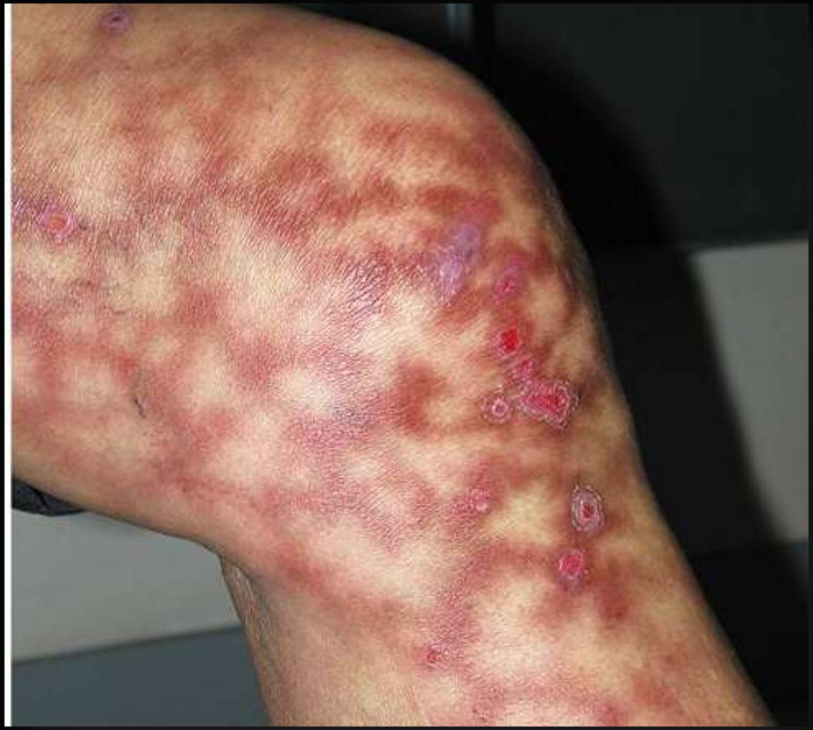


Erythema nodosum

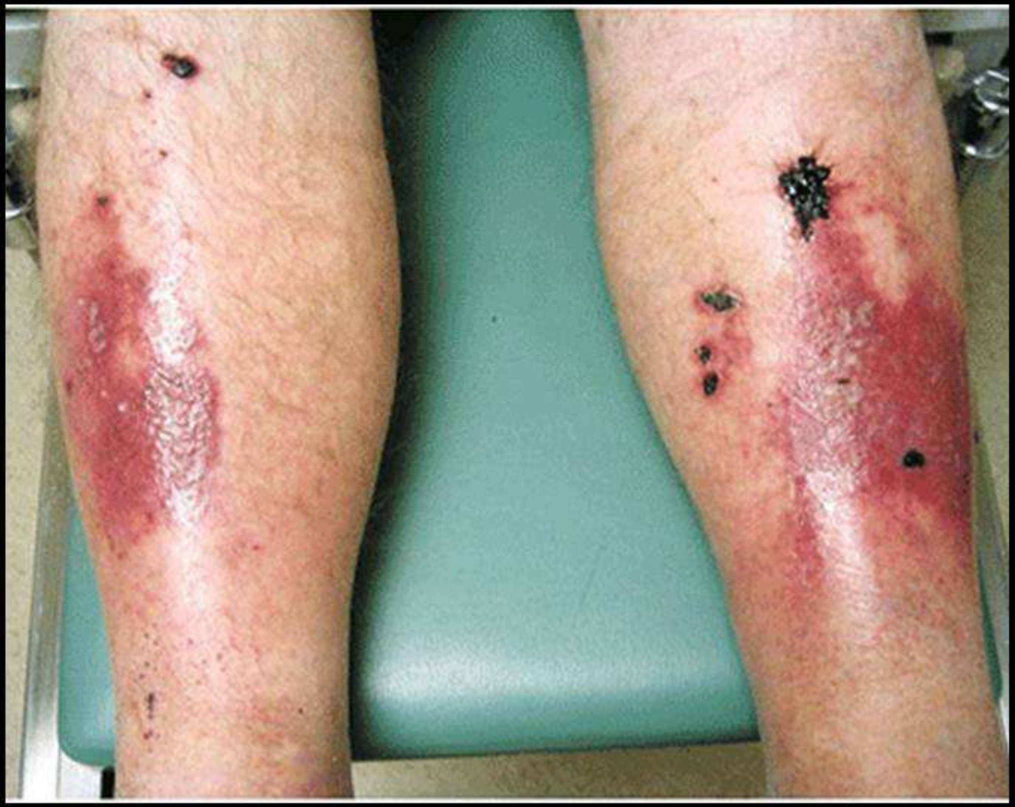
[TB, streptococcal infection, IBD, sarcoidosis, OC]



Erythema ab igne
[local heat effect]

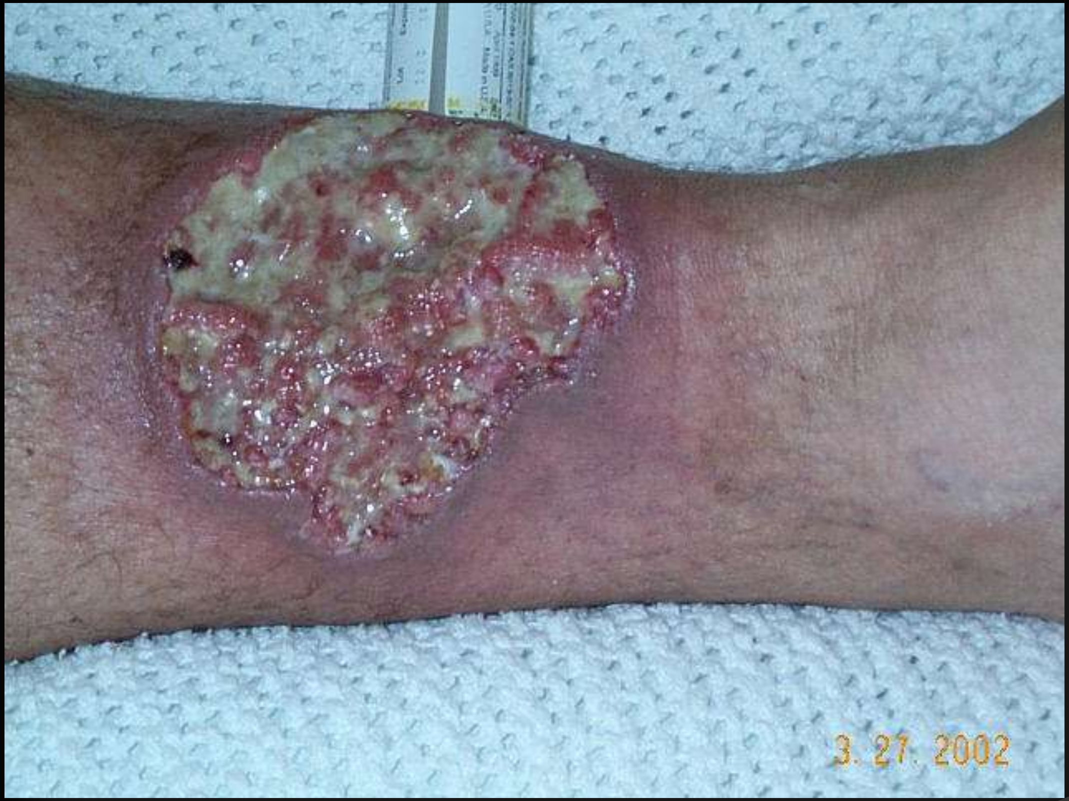


Necrobiosis lipoidica diabeticorum [DM]

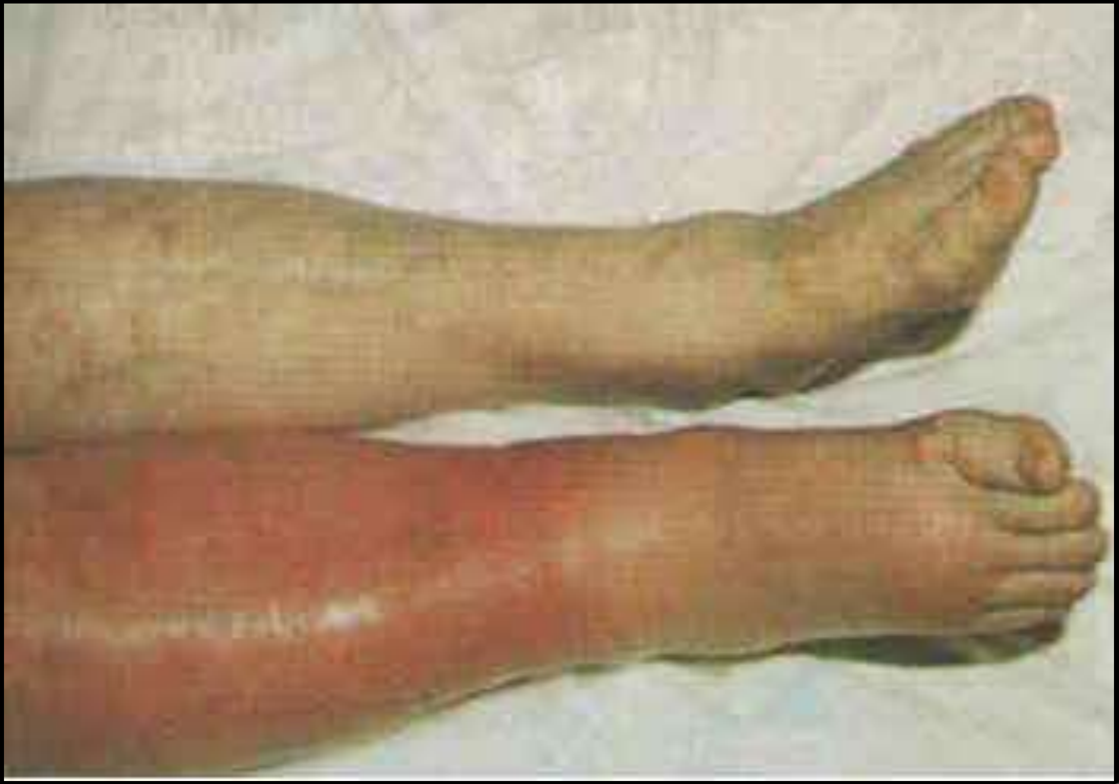


Pyoderma gangrenosum

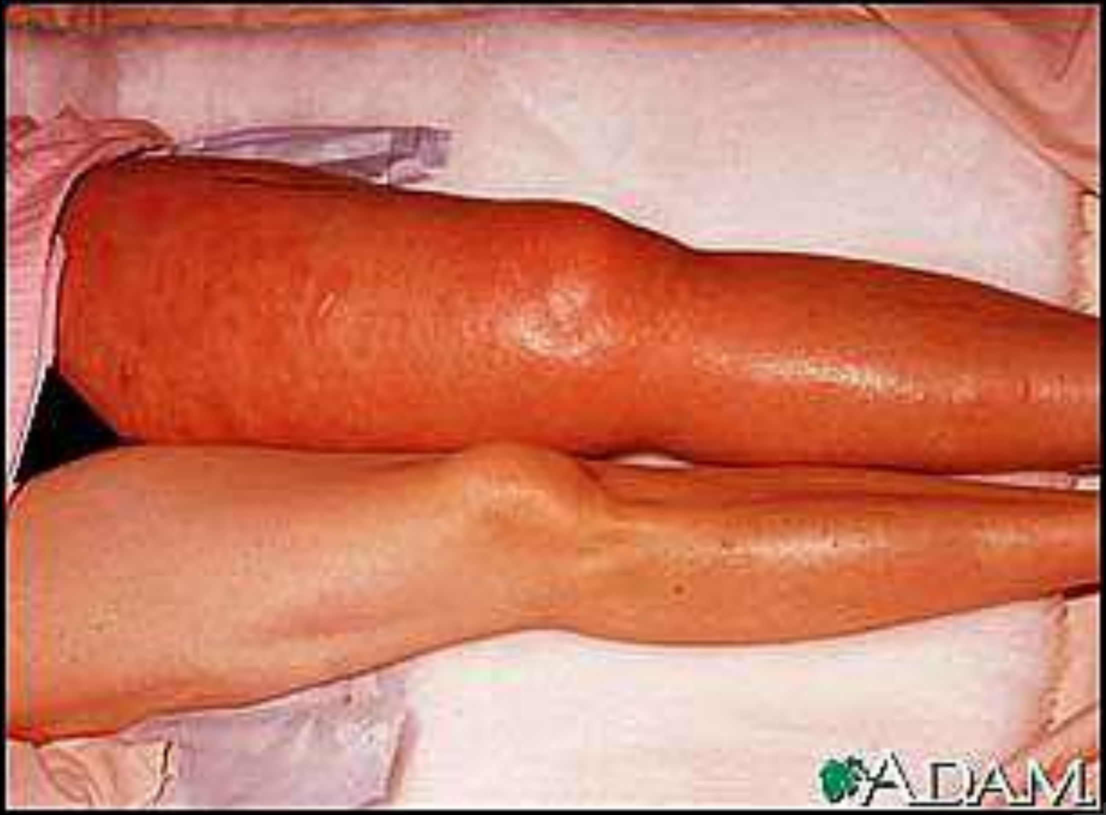
[idiopathic, IBD, chronic active hepatitis, RA, CML]



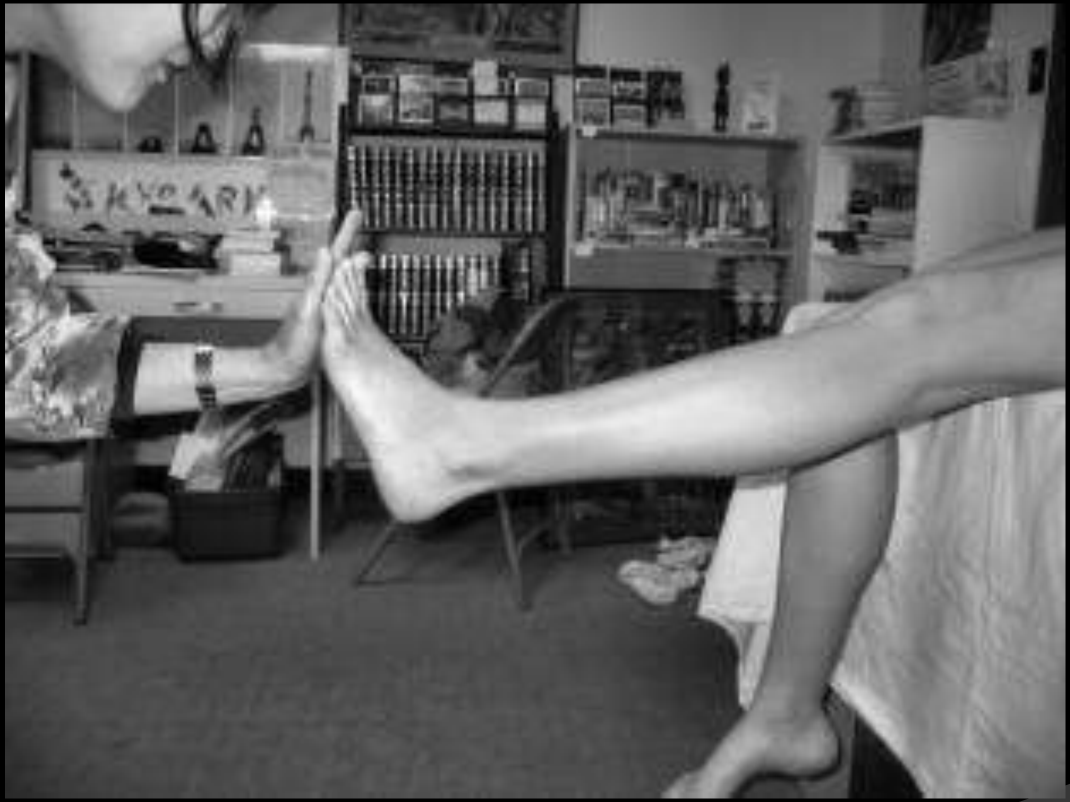
Swelling and redness of the right leg [acute DVT]



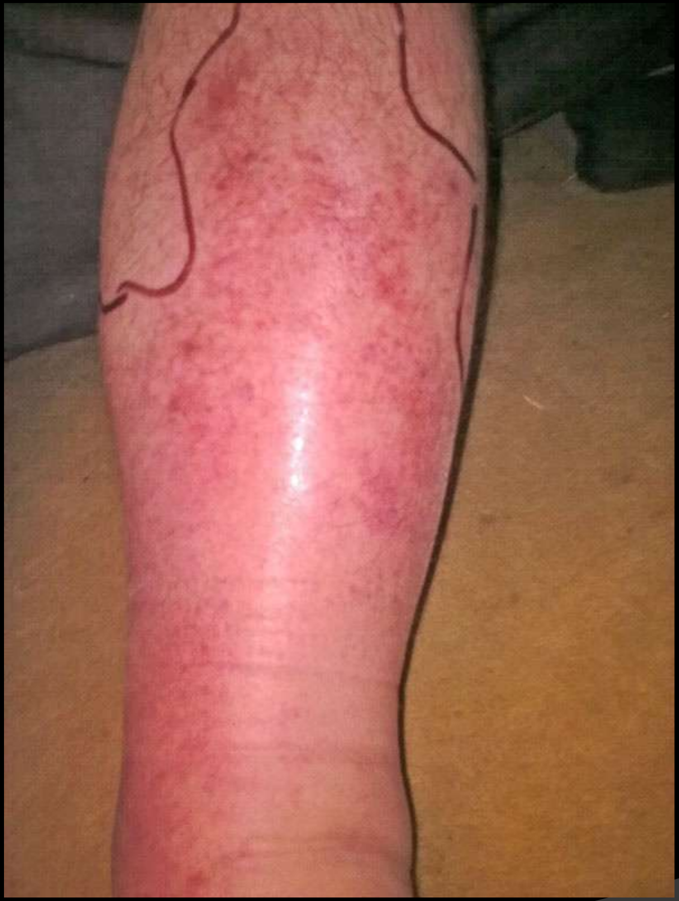
Swelling and redness of the left leg [extensive DVT]



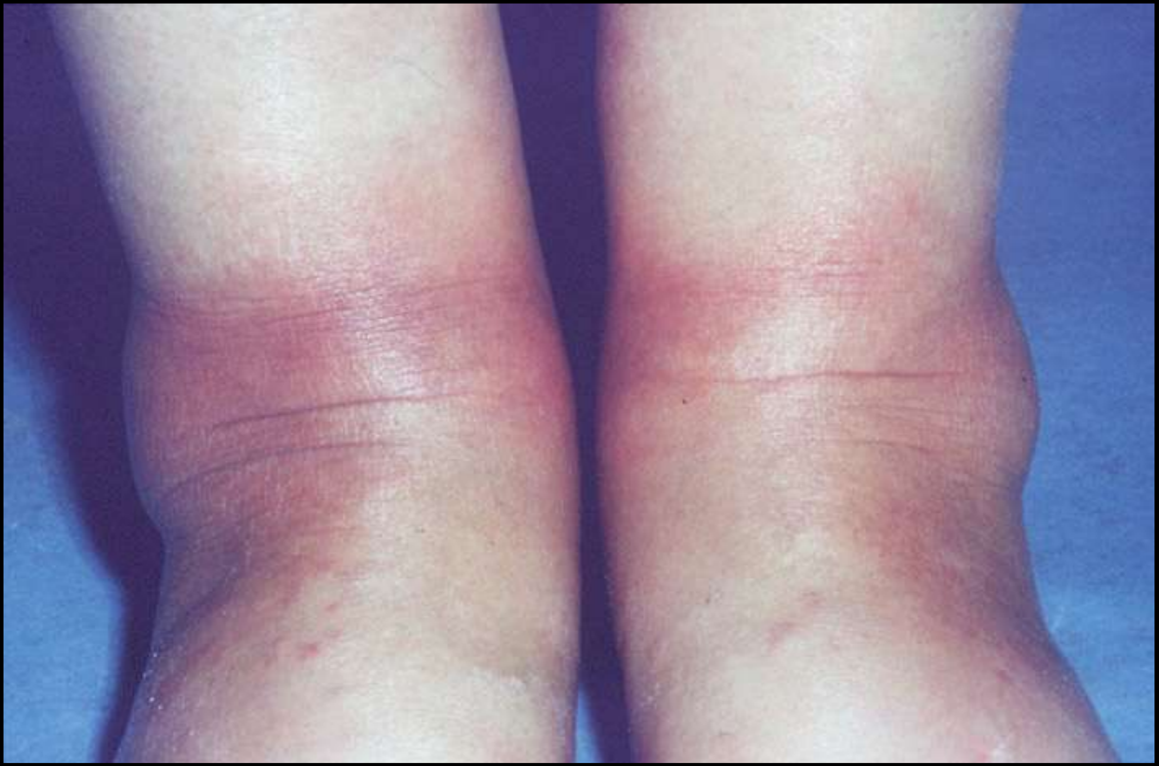
Hoffman's sign
[acute DVT]



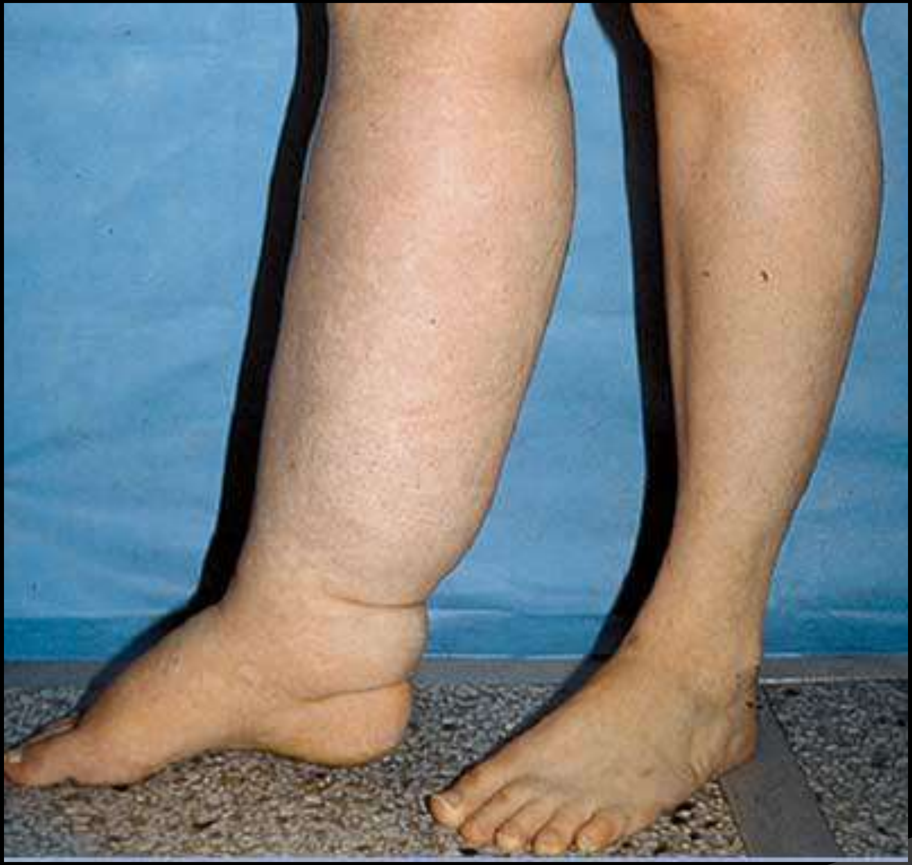
Swelling and redness of the leg [cellulitis]



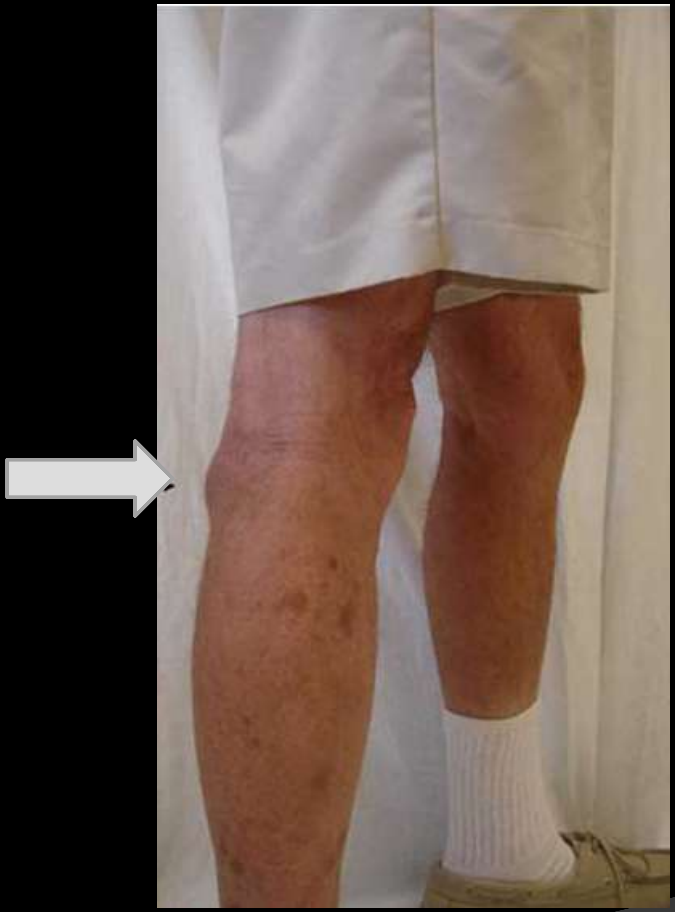
Bilateral leg edema
[heart failure, nephrotic syndrome, liver cirrhosis]



Unilateral leg edema
[lymphatic obstruction]

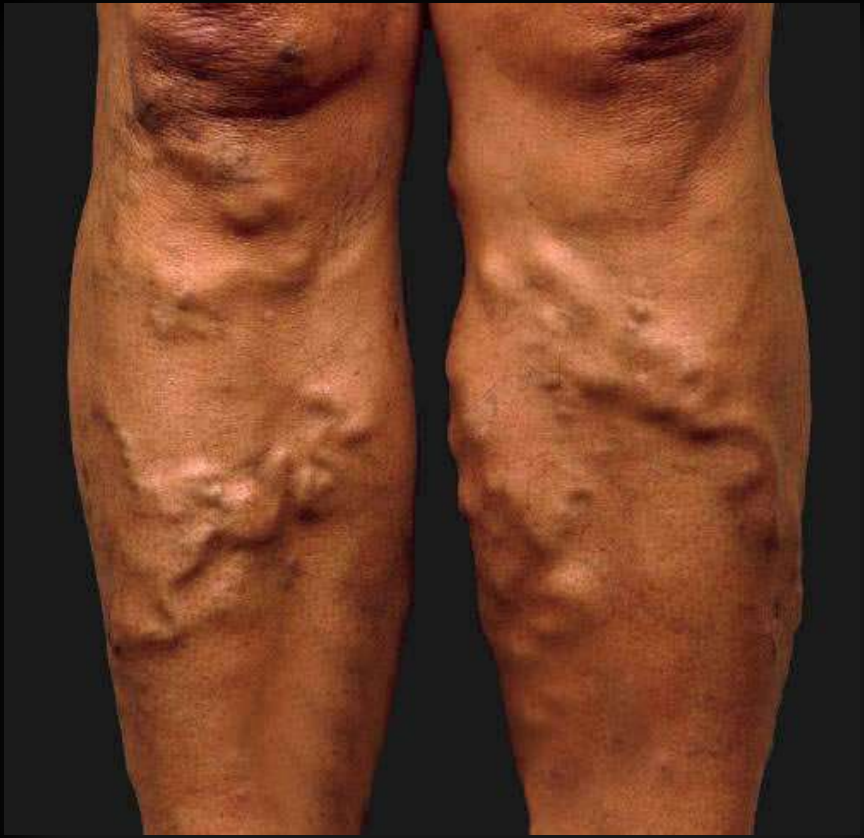


Swelling behind the right knee [Baker cyst /RA]

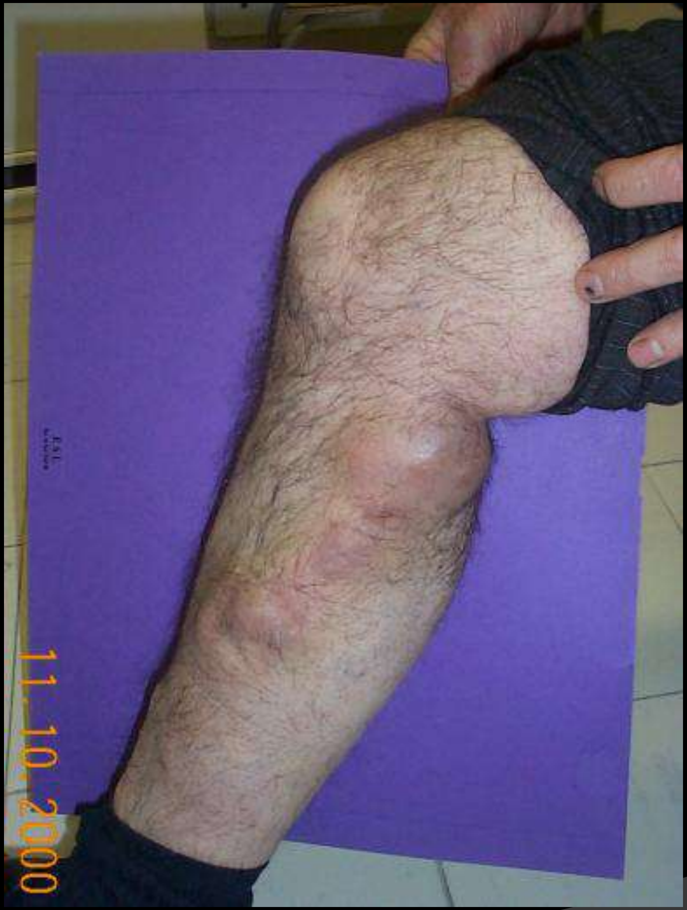


Varicose veins

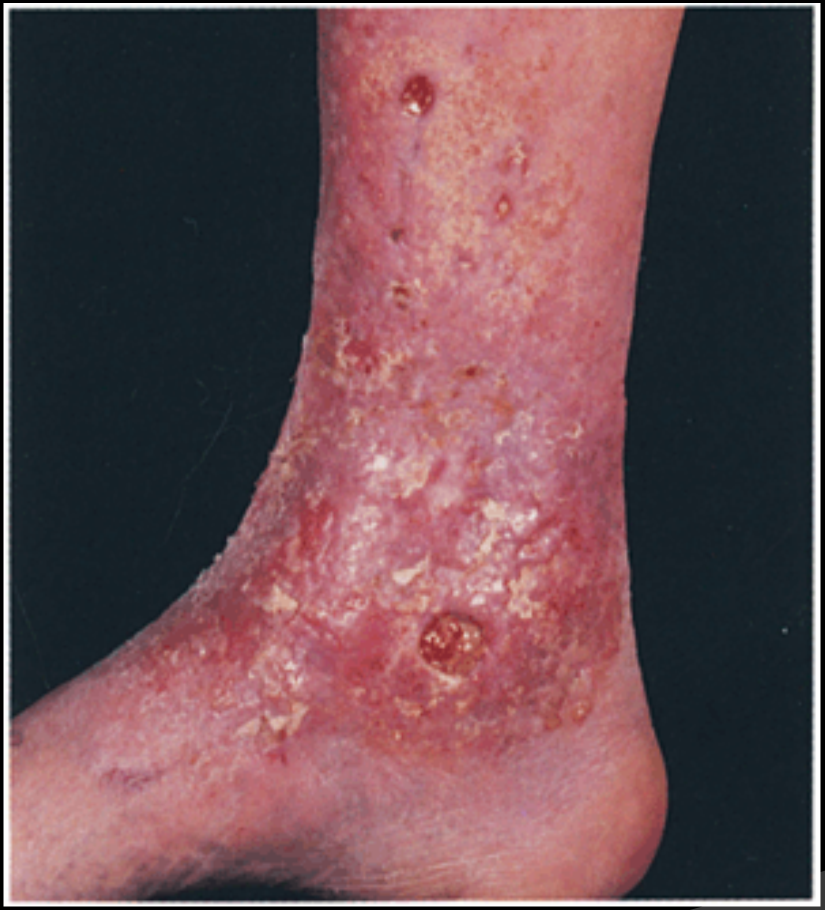
[primary or secondary to deep venous insufficiency]



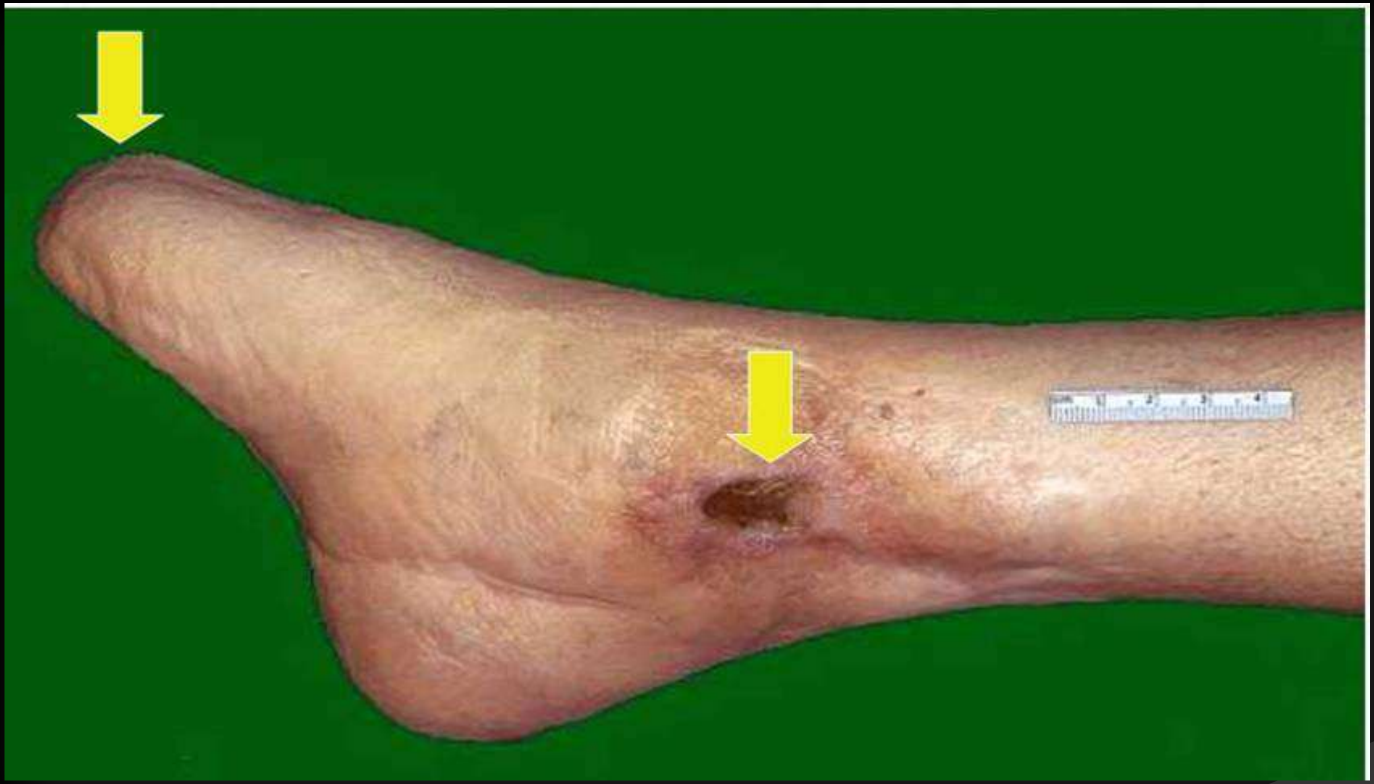
Swelling and redness of the varicose vein [superficial thrombophlebitis]



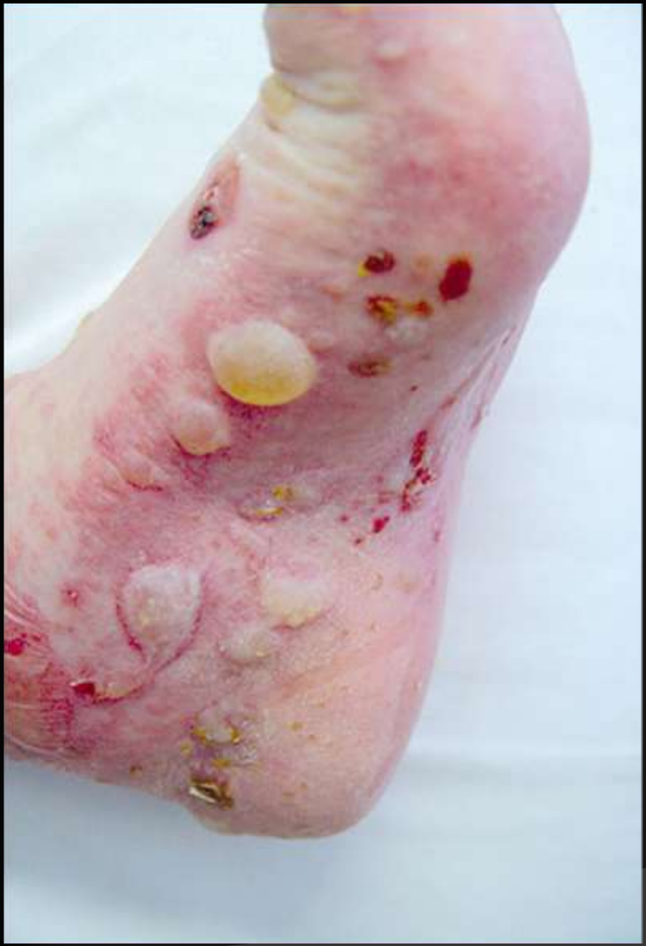
Stasis dermatitis with ulcer [chronic venous insufficiency]



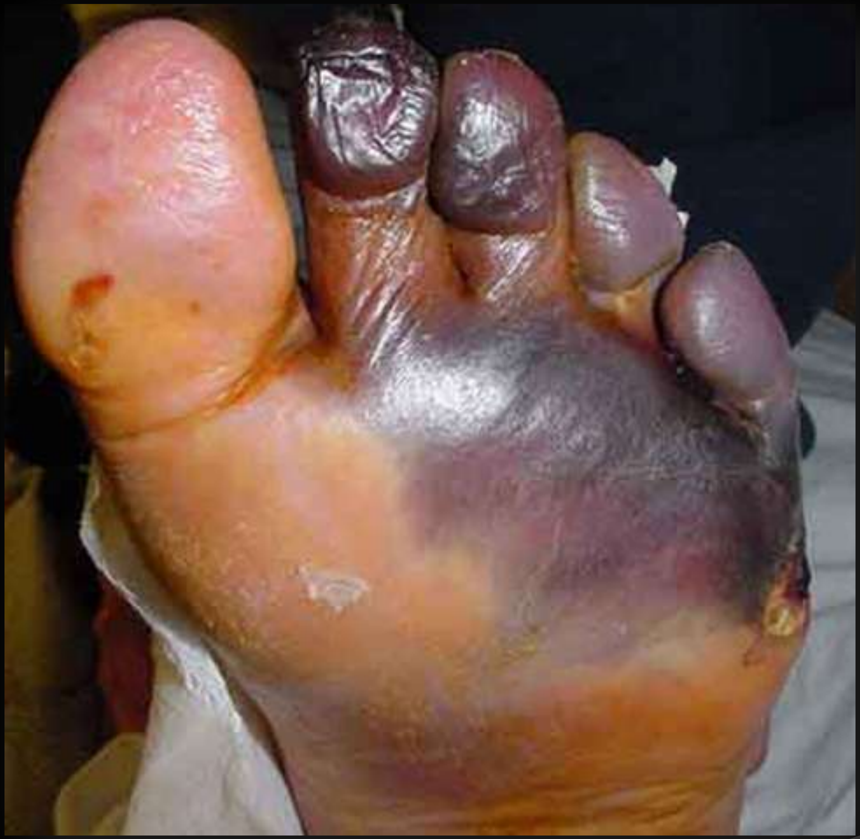
Foot ulcer and amputation of toes [DM]



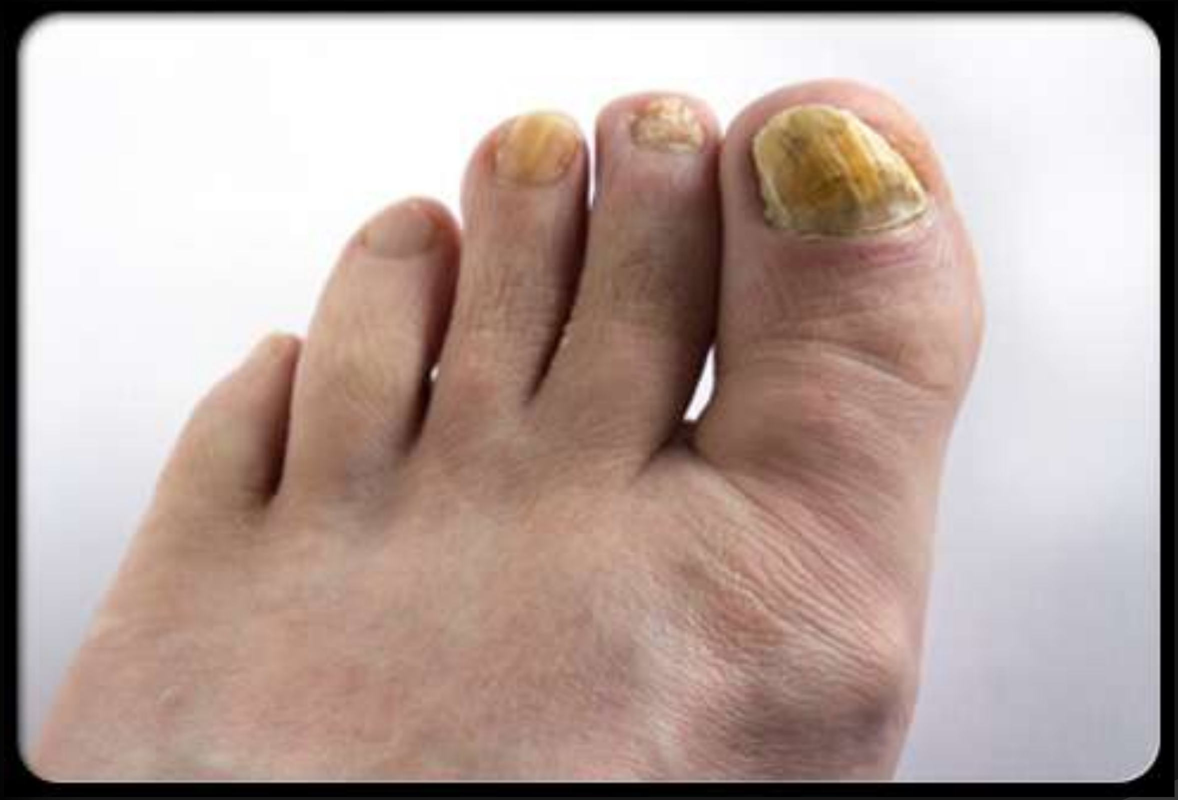
Blisters and ulcer of the foot
[DM]



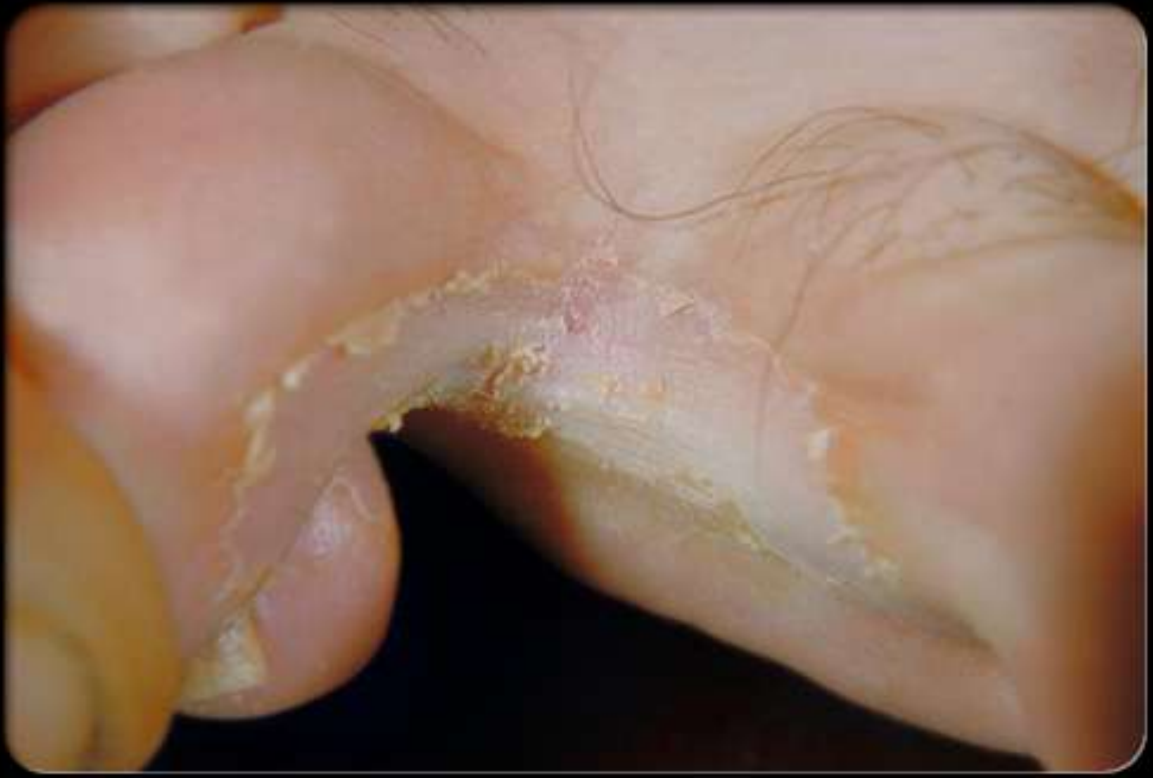
Dry gangrene
[DM]



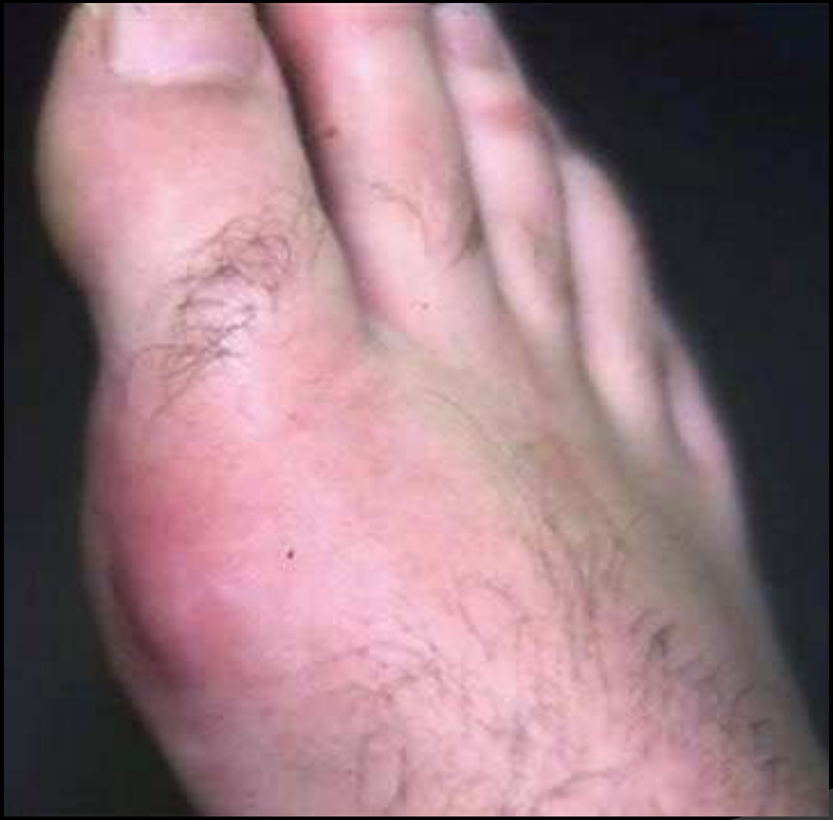
Bony abnormality and nail infection [DM]



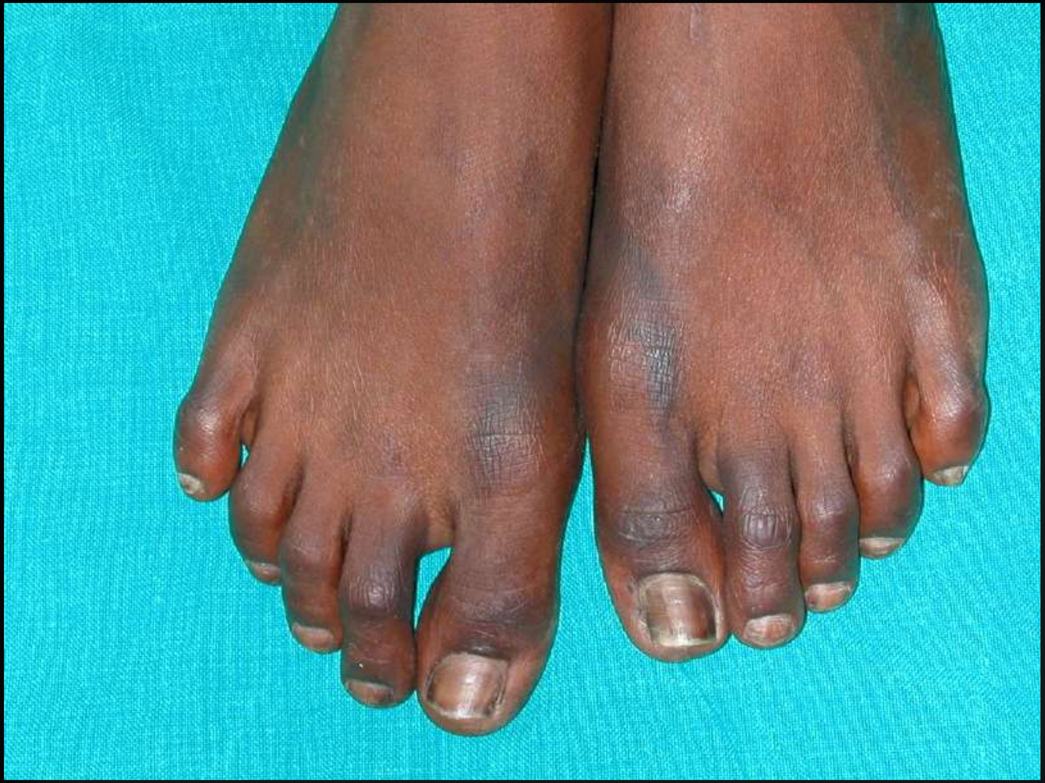
Interdigital infection
[DM]



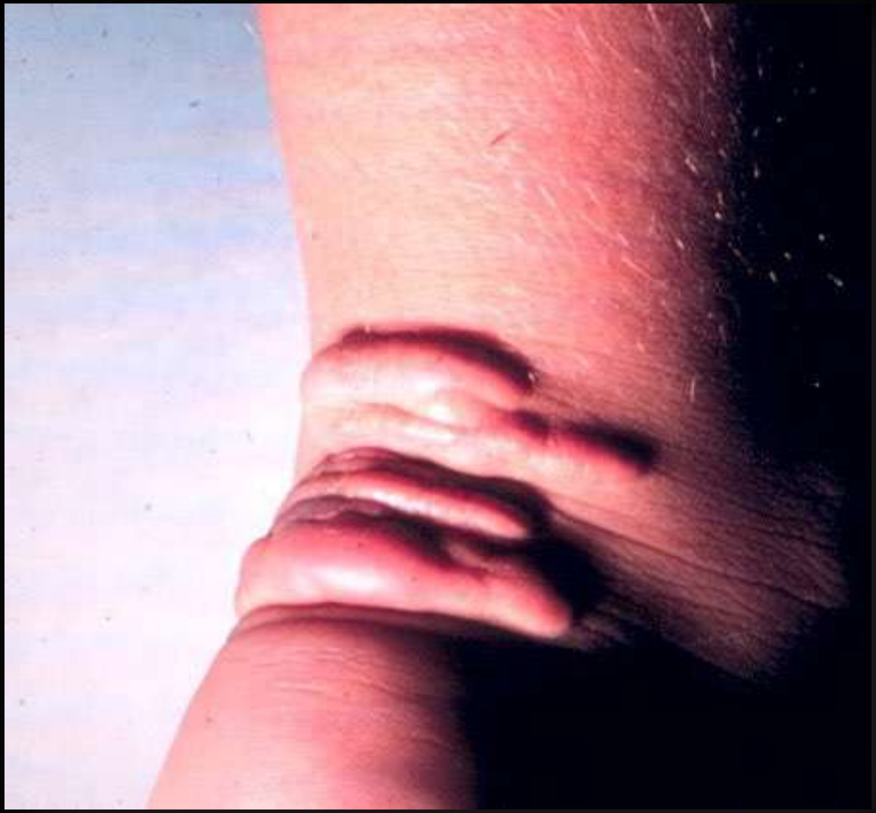
Swelling and redness of 1st MTP joint [acute gouty arthritis]



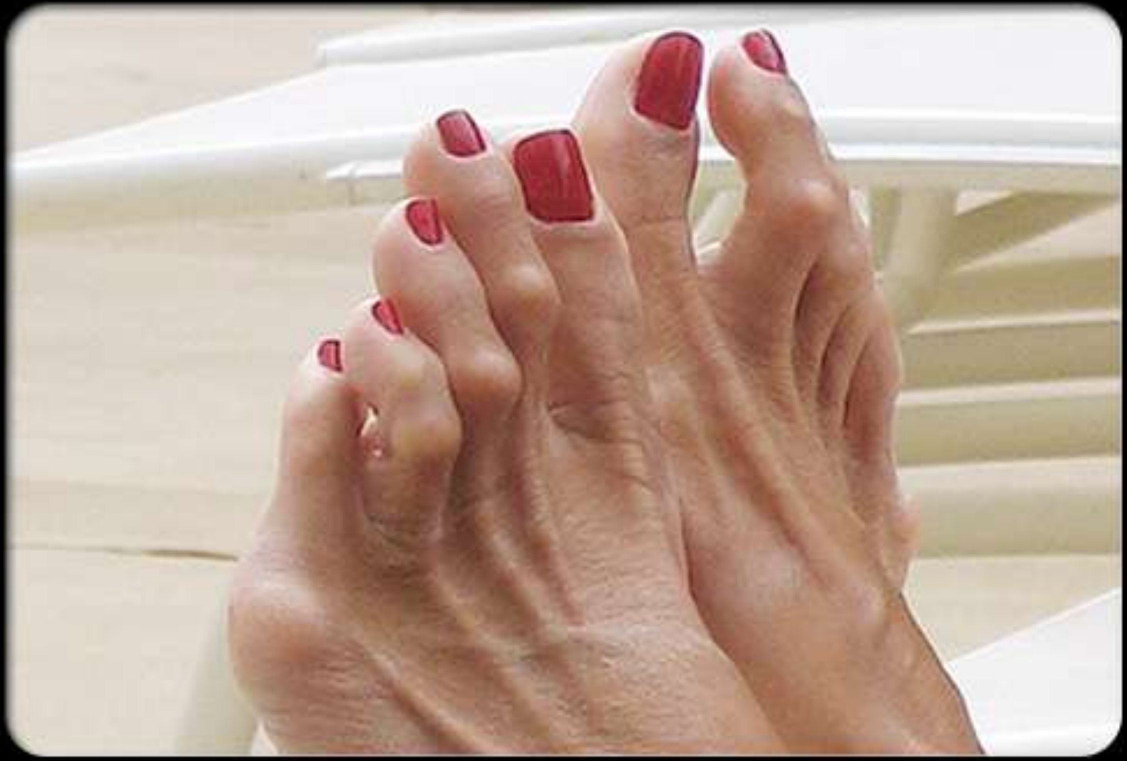
Skin hyperpigmentation [Addison's disease]



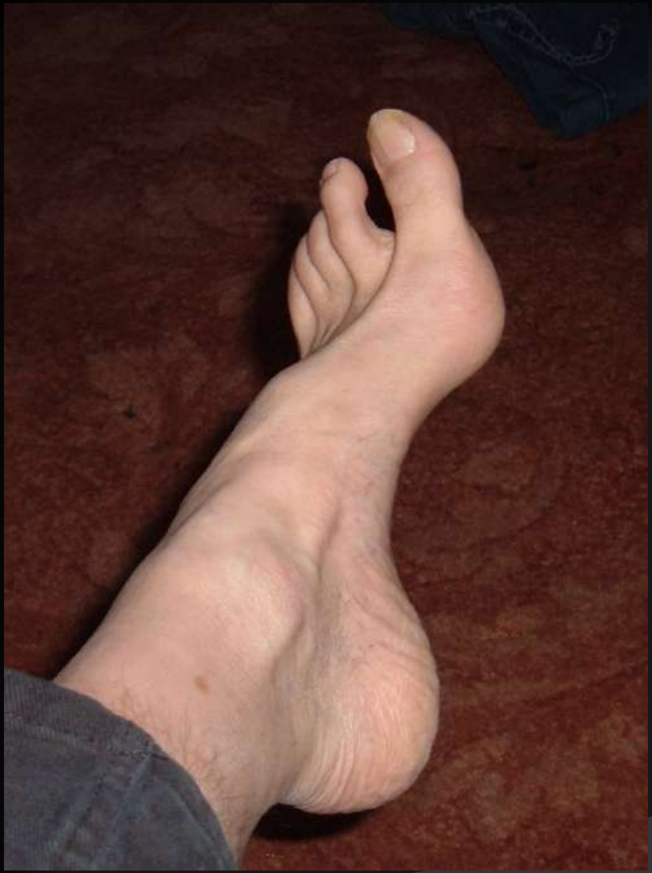
Achilles tendon xanthoma [familial hypercholesterolemia]



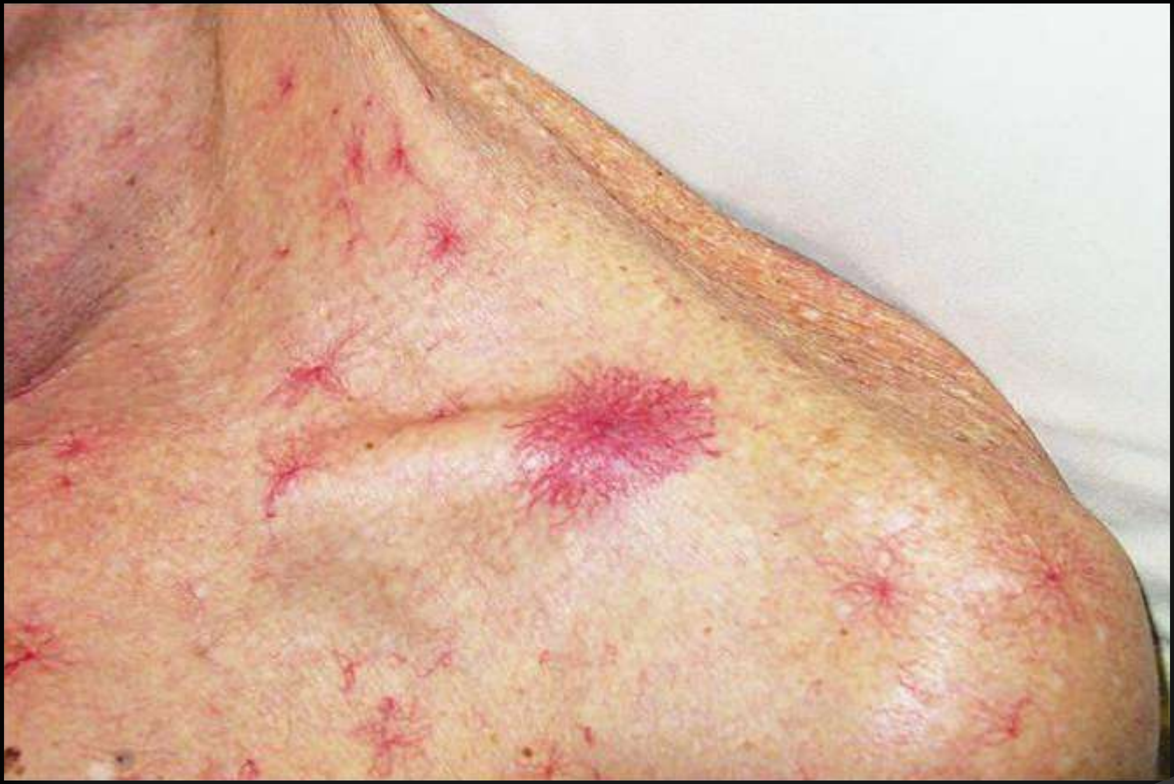
Hammer toe
[DM]



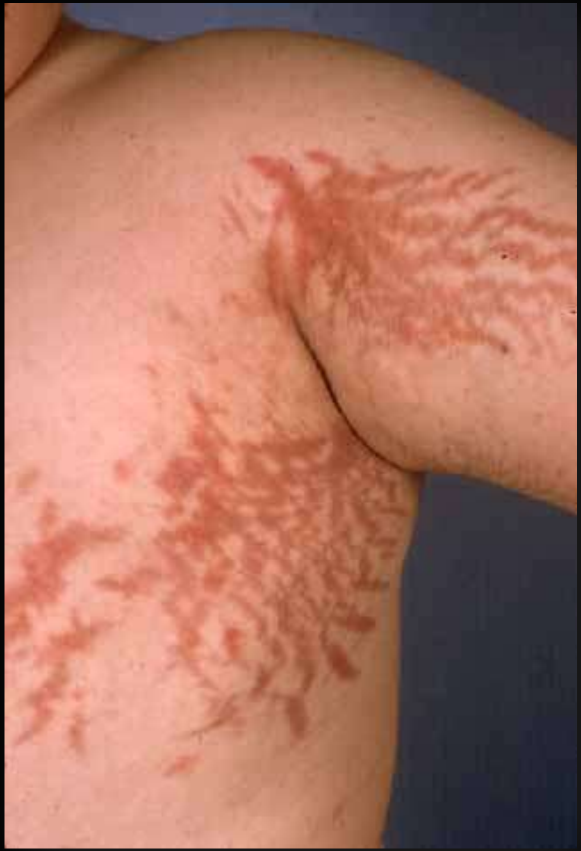
Pes cavus (high arched foot)
[Friedreich's Ataxia, Charcot-Marie-Tooth neuropathy, muscular dystrophy]



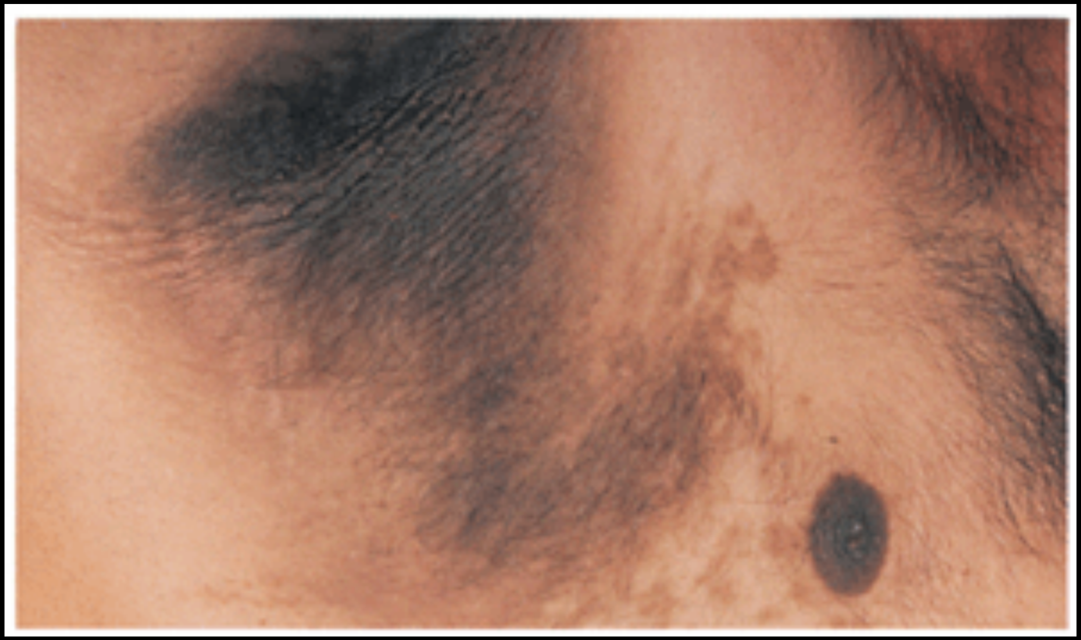
Spider nevi
[chronic liver disease]



Purplish striae
[Cushing syndrome, recent weight gain]

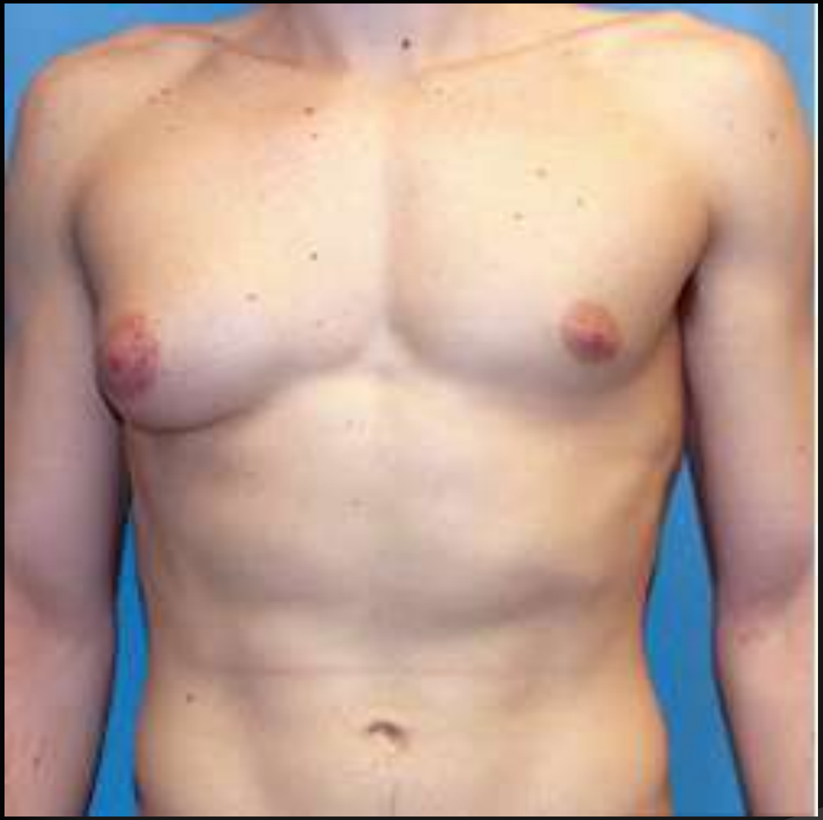


Velvety hyperpigmentation of axilla
(Acanthosis nigricans)
[obesity, acromegaly, insulin resistance, GI malignancy]

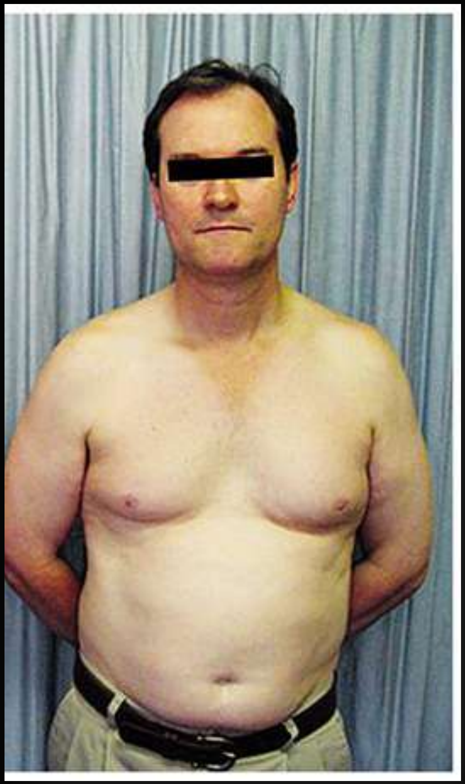


Gynecomastia

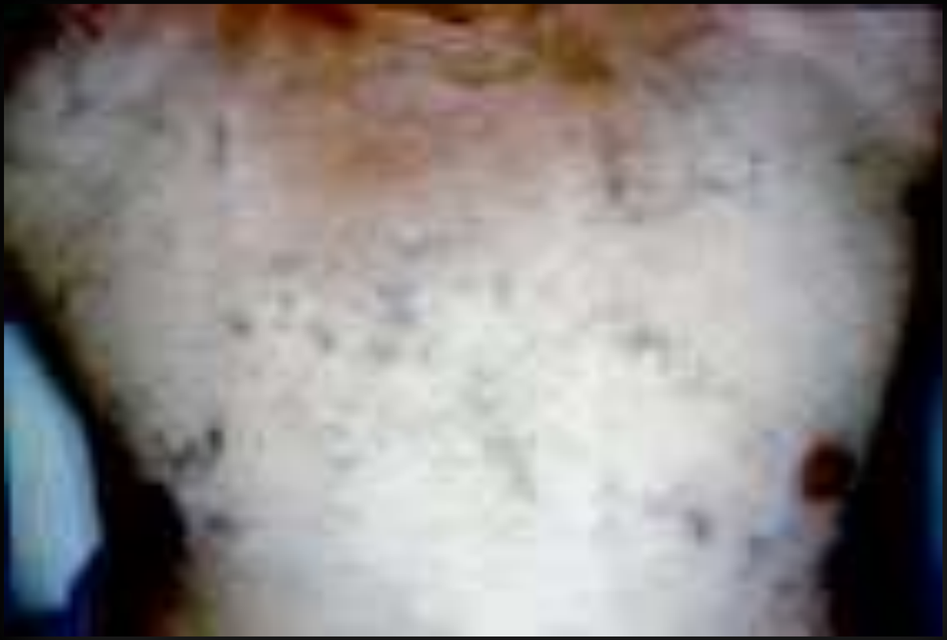
[puberty, liver disease, drugs like cimetidine, digoxin and spironolactone]



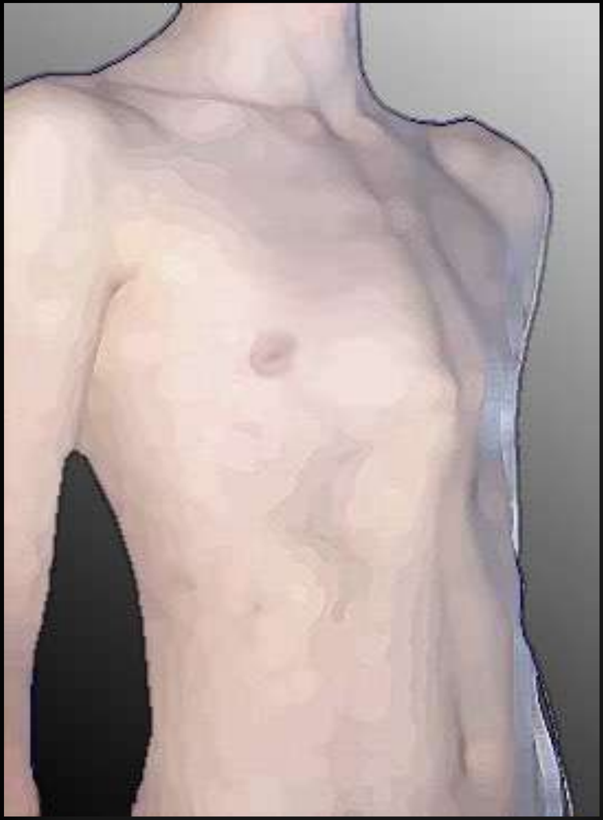
Loss of male hair distribution [hypogonadism: hypothalamic-pituitary disorders, testicular disease, liver cirrhosis]



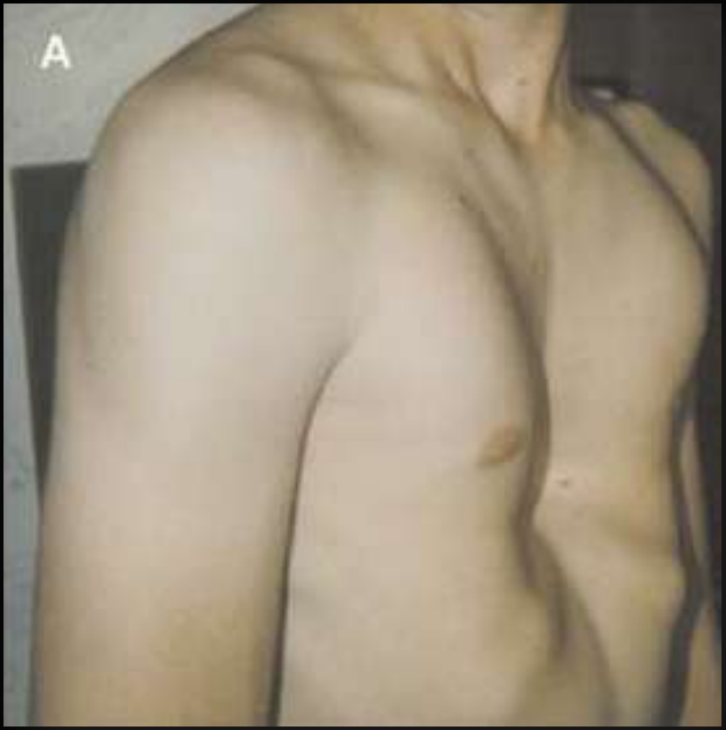
Dilated superficial veins
[superior vena cava obstruction]



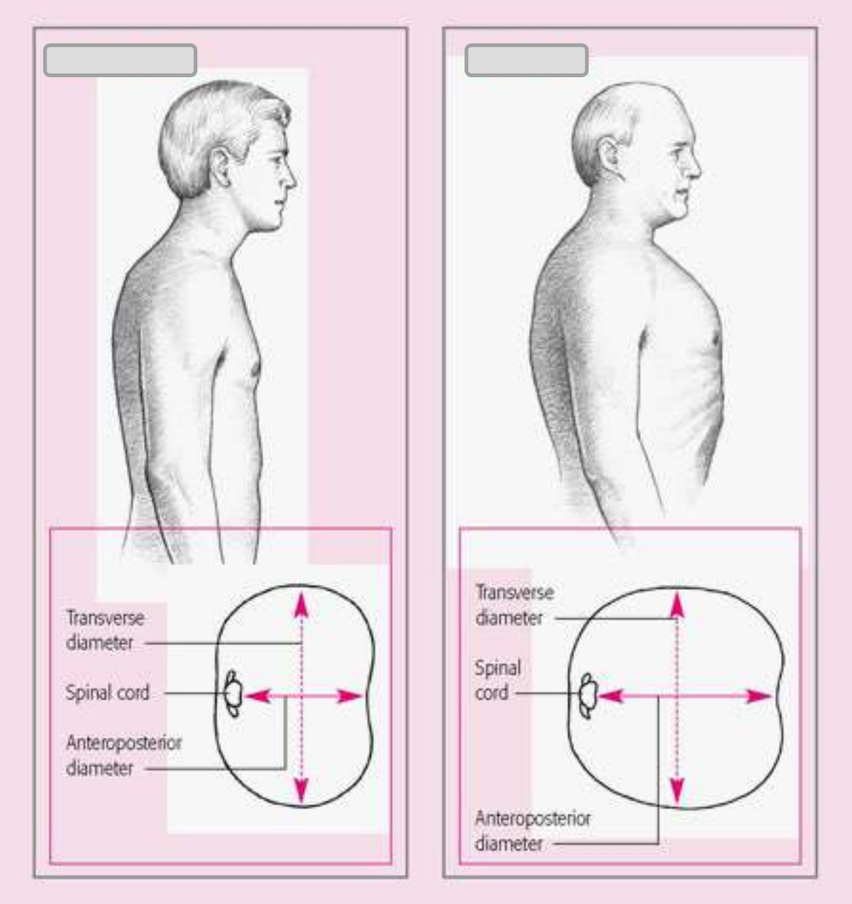
Pectus carinatum
[congenital, Marfan syndrome]



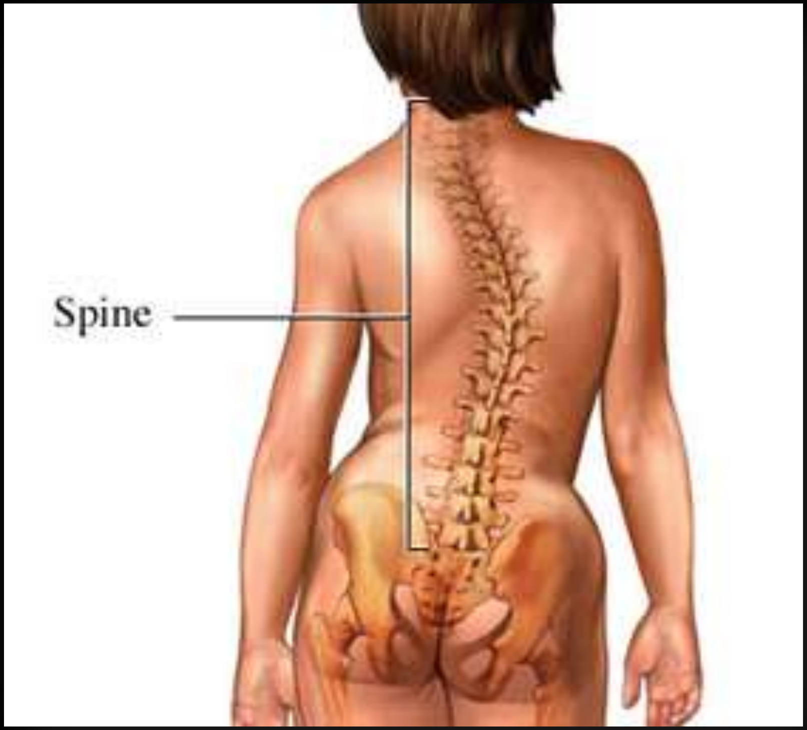
Pectus excavatum
[congenital, Marfan syndrome]



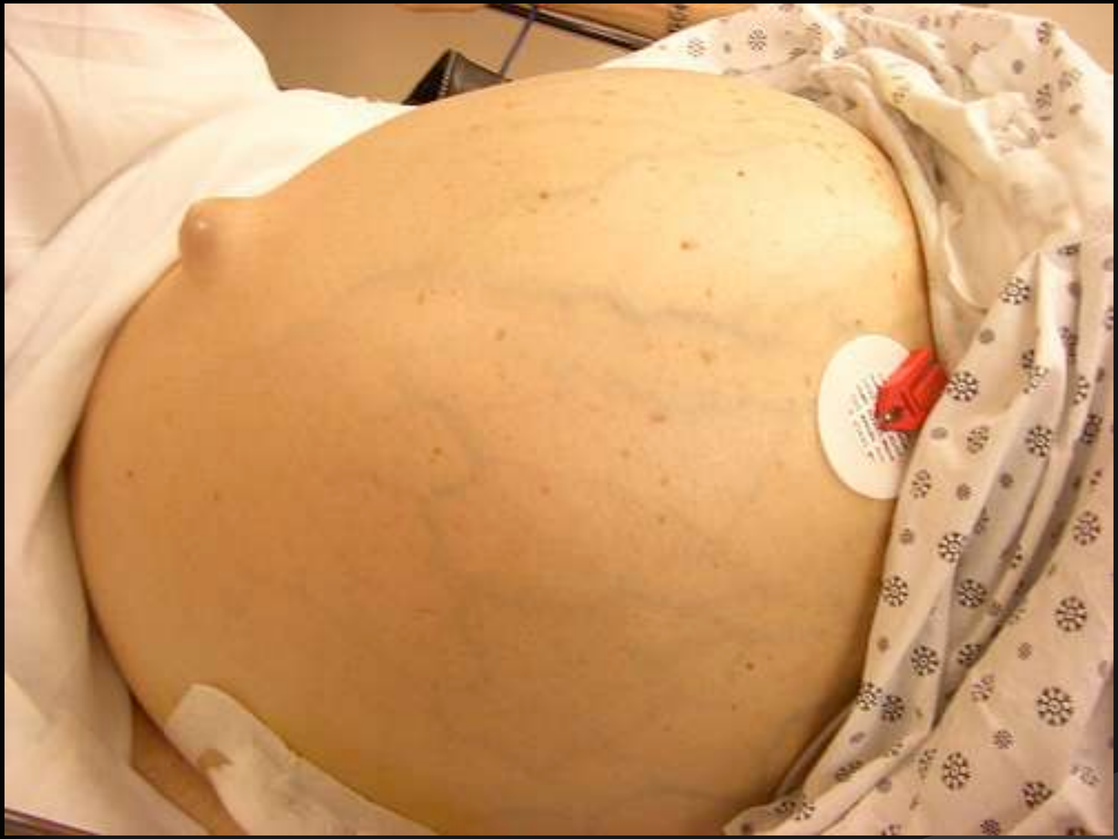
Barrel chest
[chronic obstructive lung diseases]



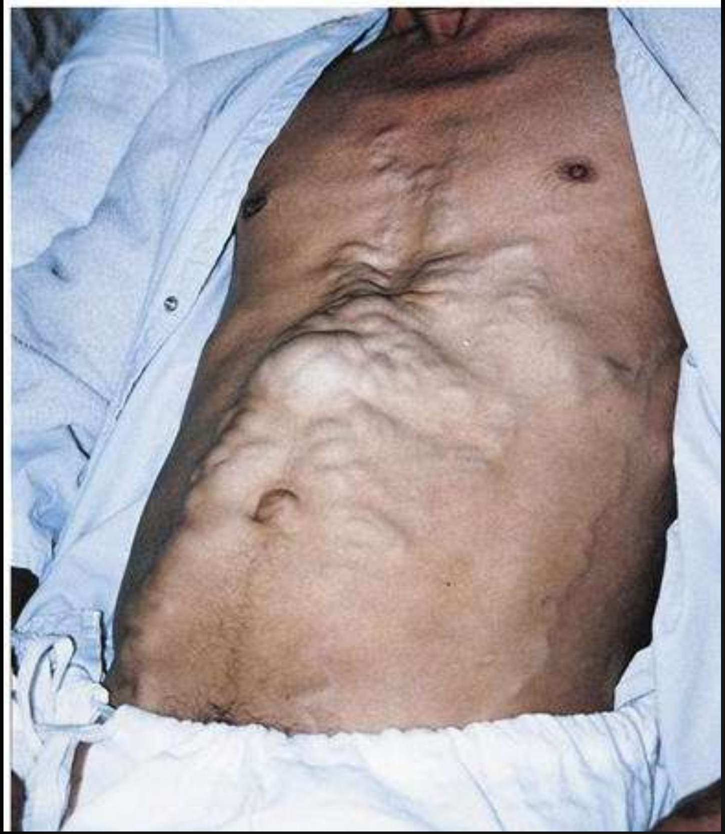
Scoliosis
[congenital, Marfan syndrome]



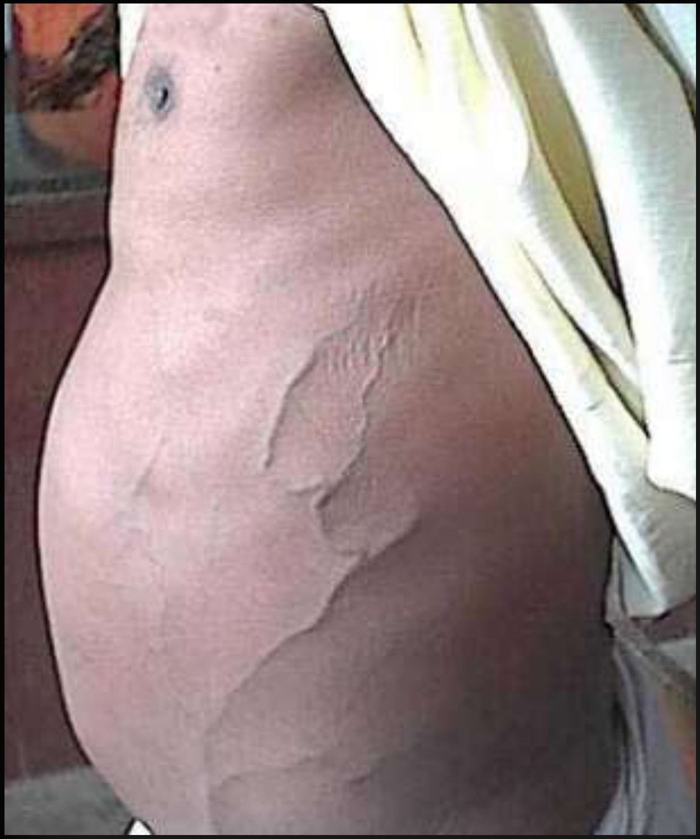
Ascites
[liver cirrhosis, nephrotic syndrome, heart failure, TB peritonitis, malignancy]



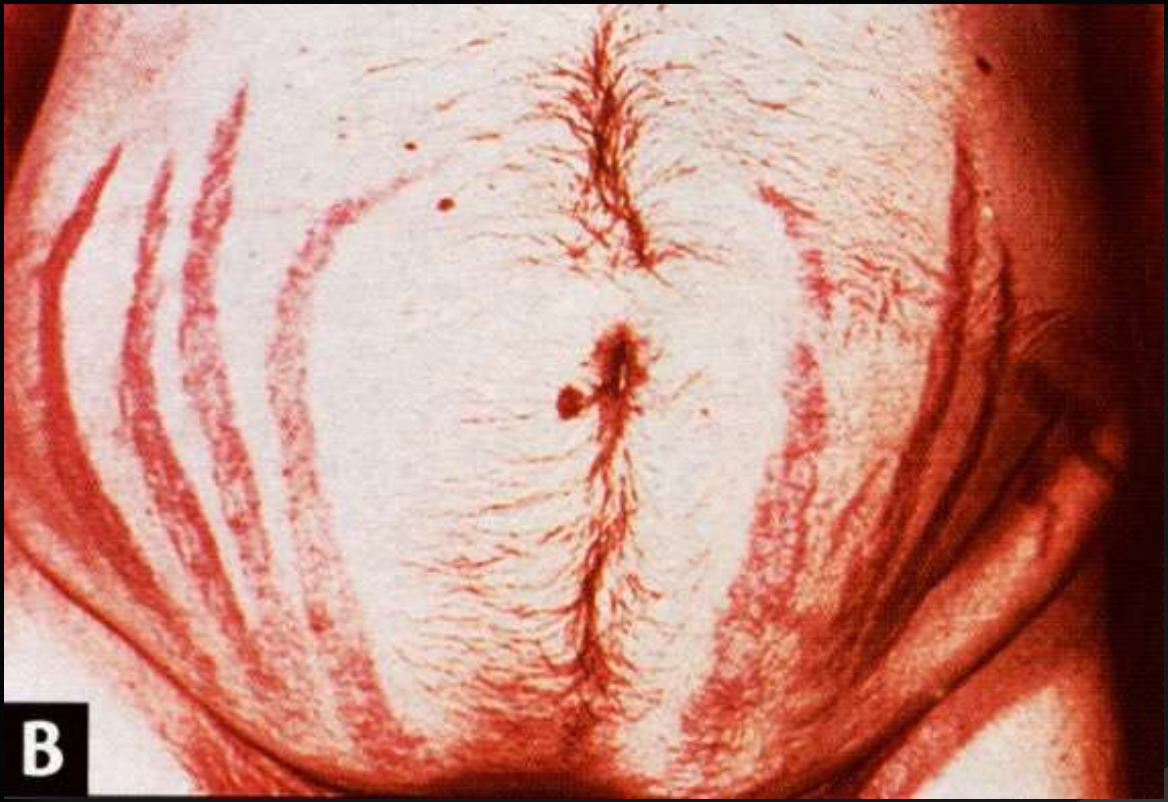
Caput medusa (dilated peri-umbilical veins) [liver cirrhosis with portal hypertension]



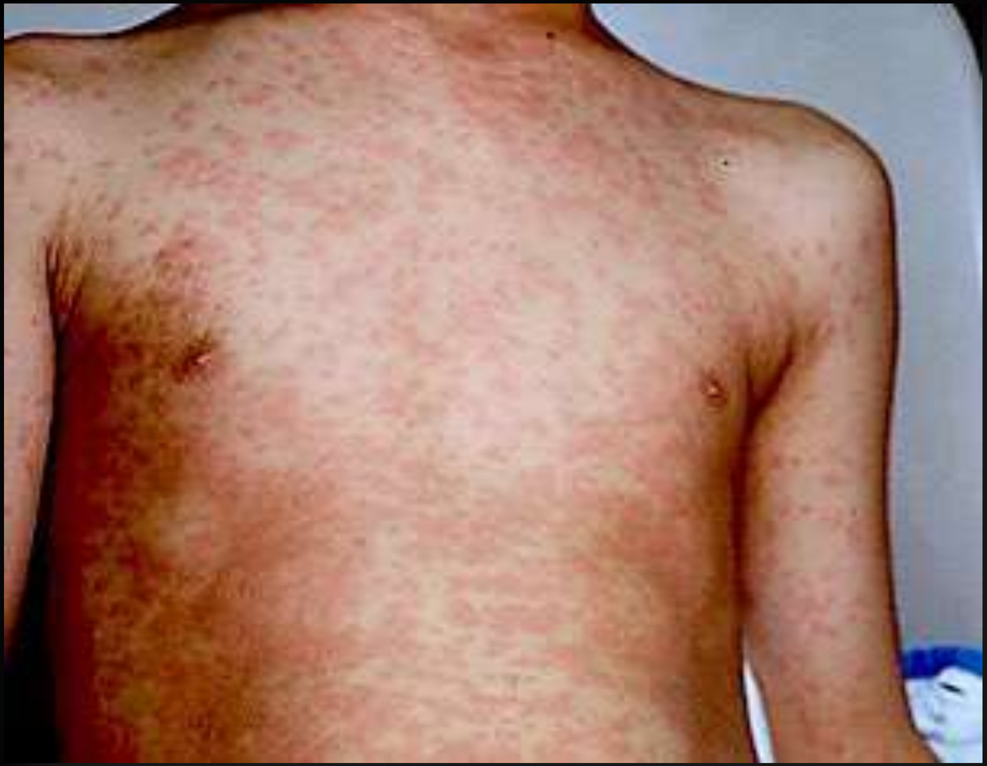
Dilated superficial veins with upwards flow [inferior vena cava obstruction]



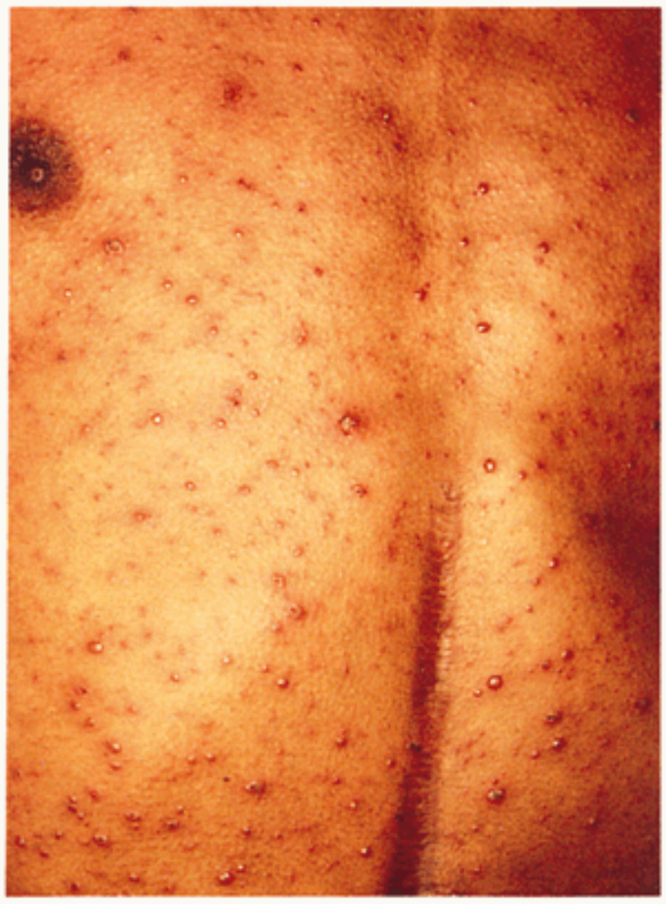
Purplish abdominal striae [Cushing syndrome]



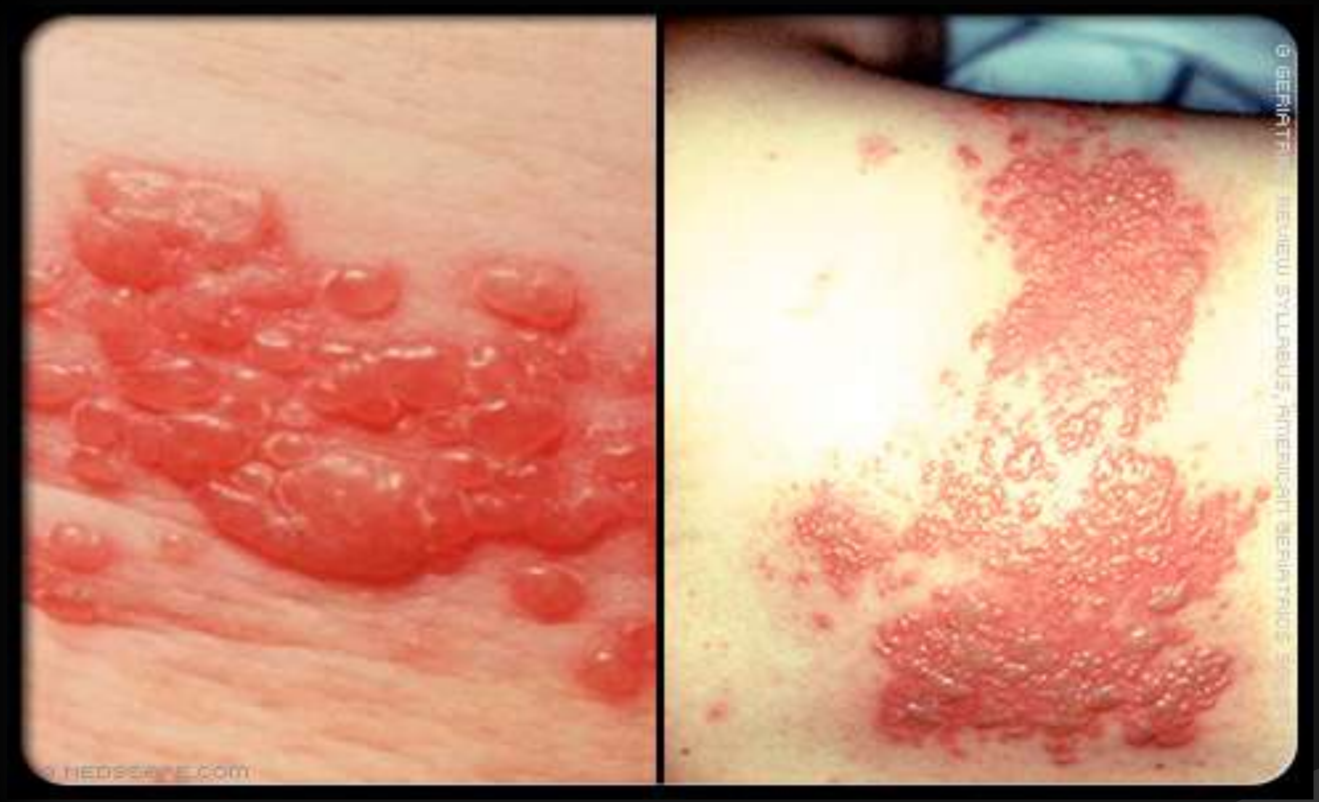
Maculopapular rash
[viral infections like measles, drug allergy]



vesicular eruption of variable stages [Varicella (chicken pox)]

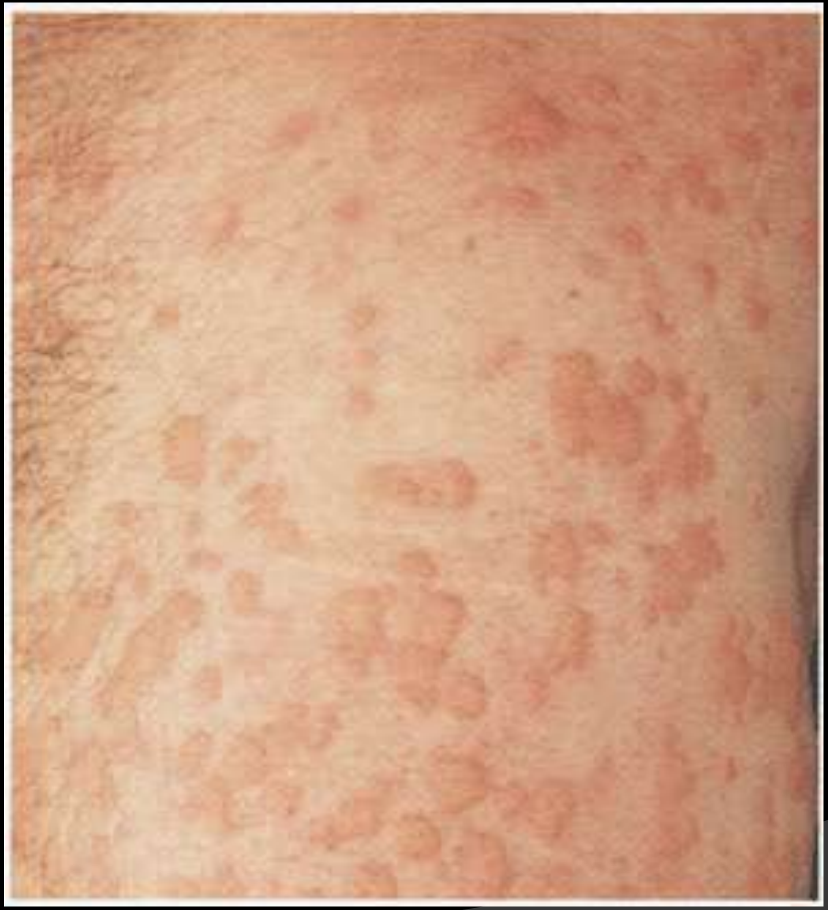


Unilateral vesicular eruption [Herpes zoster (shingles)]

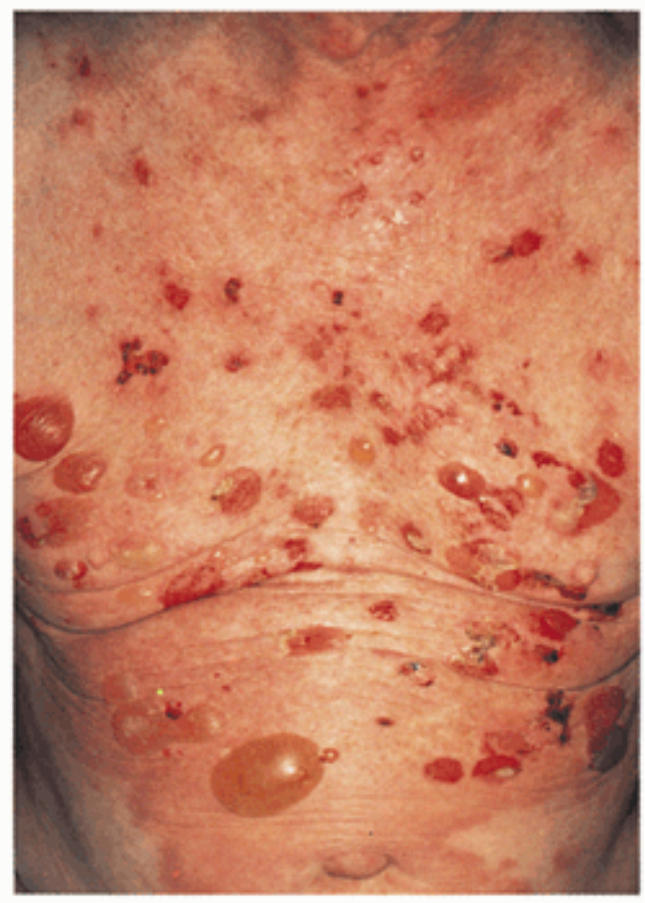


Urticaria

[drug allergy, physical urticaria, hereditary urticaria and vasculitis]

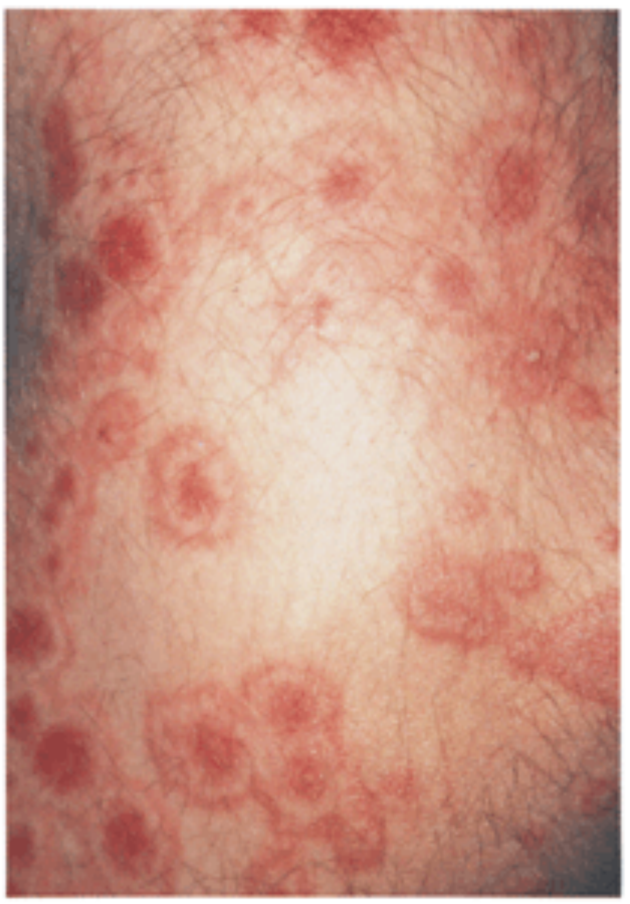


Blisters over the abdomen [Bullous pemphigoid]

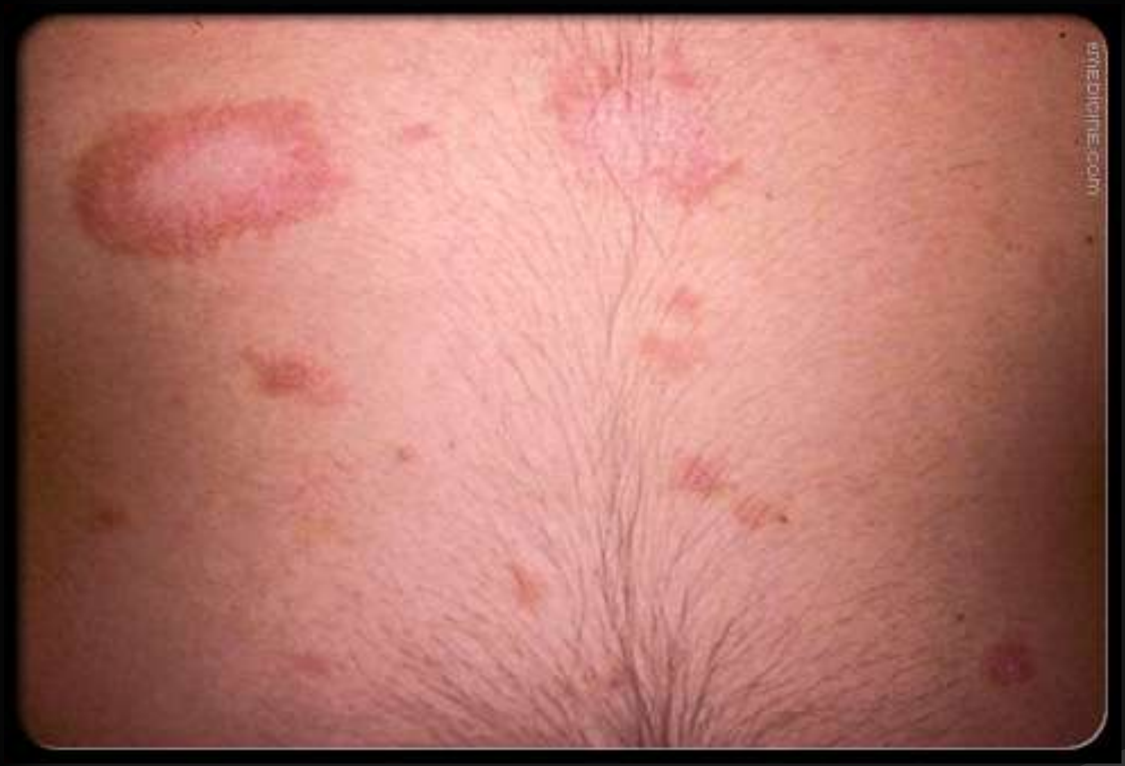


Erythema multiform

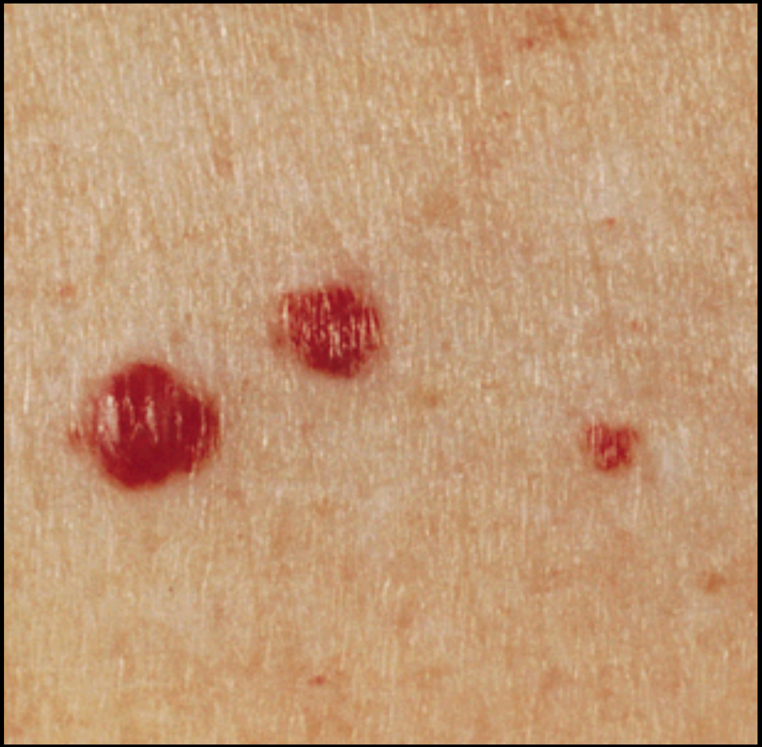
[drug allergy, herpes and Mycoplasma infection]



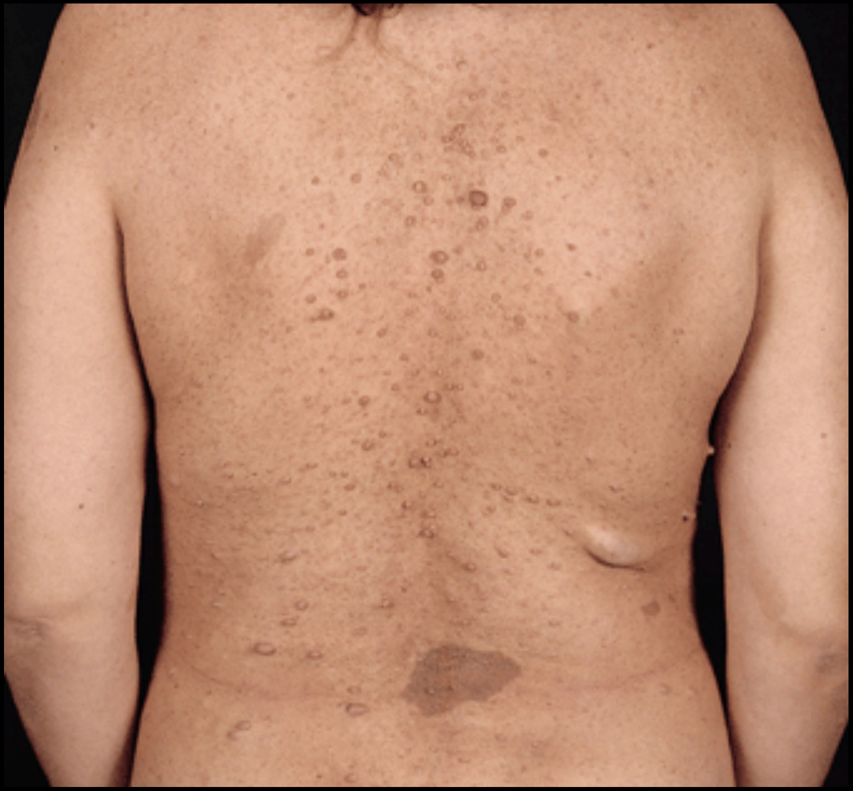
Scaly lesion with central healing and peripheral inflammation
[Tinea (ring worm) /fungal infection]



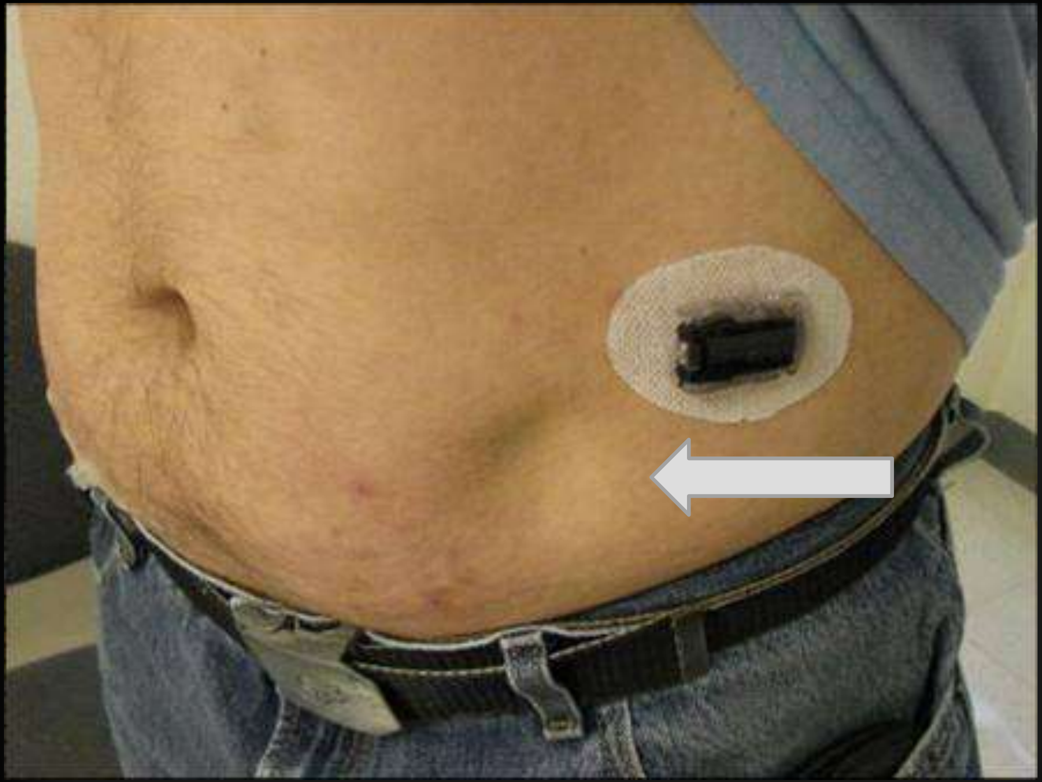
Erythematous papules in the trunk [cherry hemangioma]



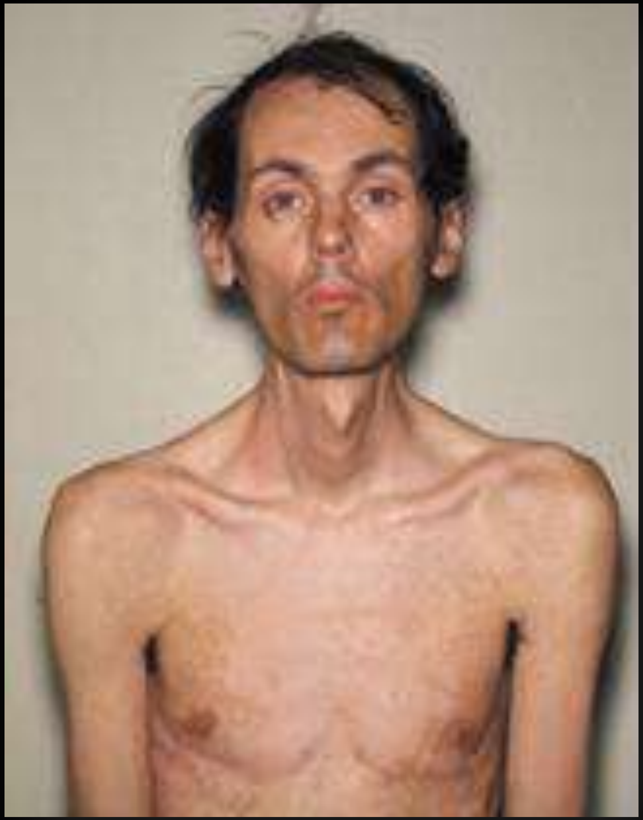
Neurofibromas and café au lait spots
[neurofibromatosis type 1]
(Von Recklinghausen's disease)



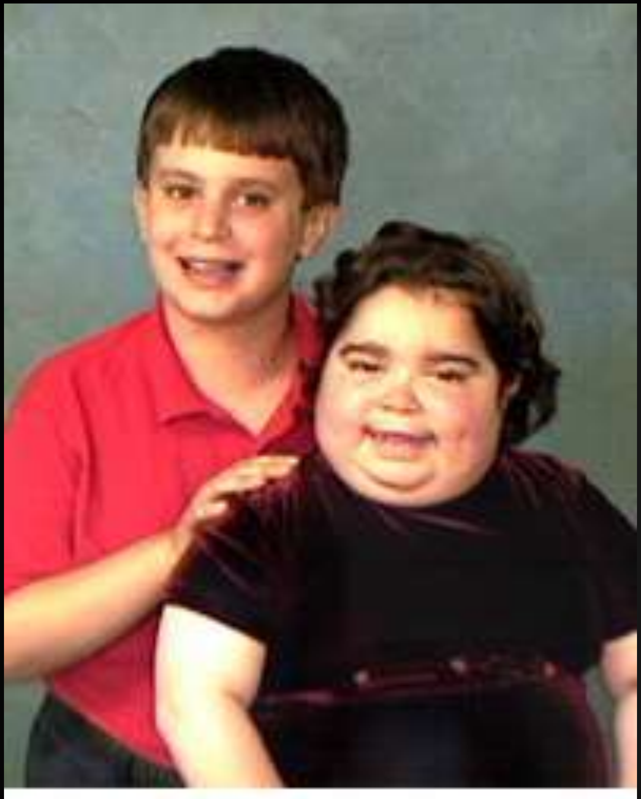
Lipoatrophy
[local complication of insulin injection]



Wasting of face and neck muscles/frontal baldness [myotonic dystrophy]



Short stature and obesity [Cushing syndrome in children]



Gigantism
[GH excess before puberty]

Atlas of Physical Signs and Clinical Examination

B y : Dr. Ammar Alkhatib

Kotaiba

باسم الله الرحمن الرحيم

Preface

- The aim of this atlas is to help the medical students in the detection and interpretation of the physical signs of various medical diseases.
- This atlas also contains movies that demonstrate the clinical examination of the neck, chest, heart, abdomen and nervous system.

(cont.)

Preface

- I have no authority for any of these slides but I had collected them from different websites and added my notes.
- To open any chapter click on its title in the content.
- The title of the slide has been hidden for self assessment. To reveal the title click on the slide.

Assist. prof. Safaa Ali
FICMS (med.)
College of Medicine / Kufa University
2009

safaaali65@yahoo.com

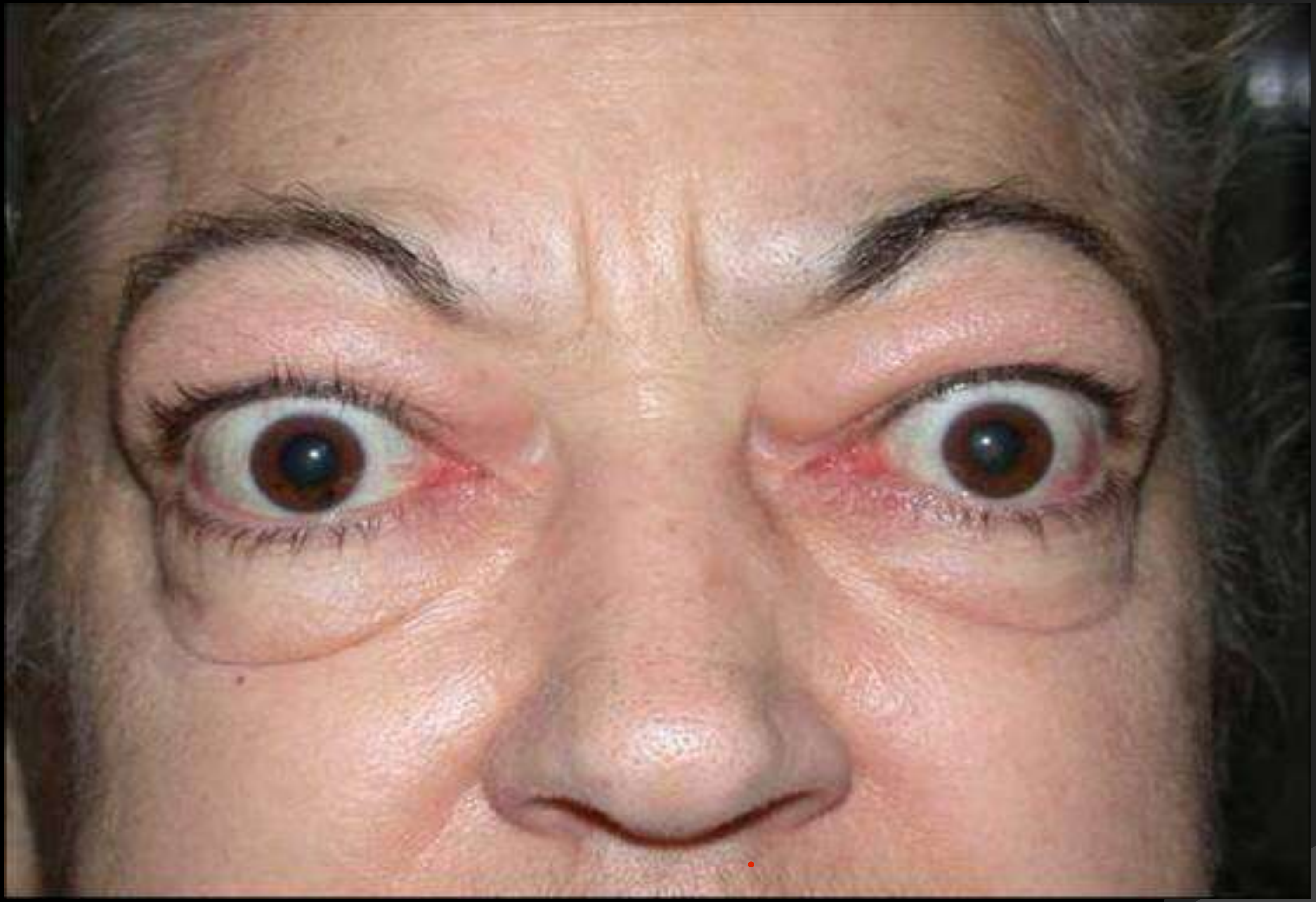
Contents

1. Physical signs

2. Clinical examination

Lid retraction [Thyrotoxicosis]

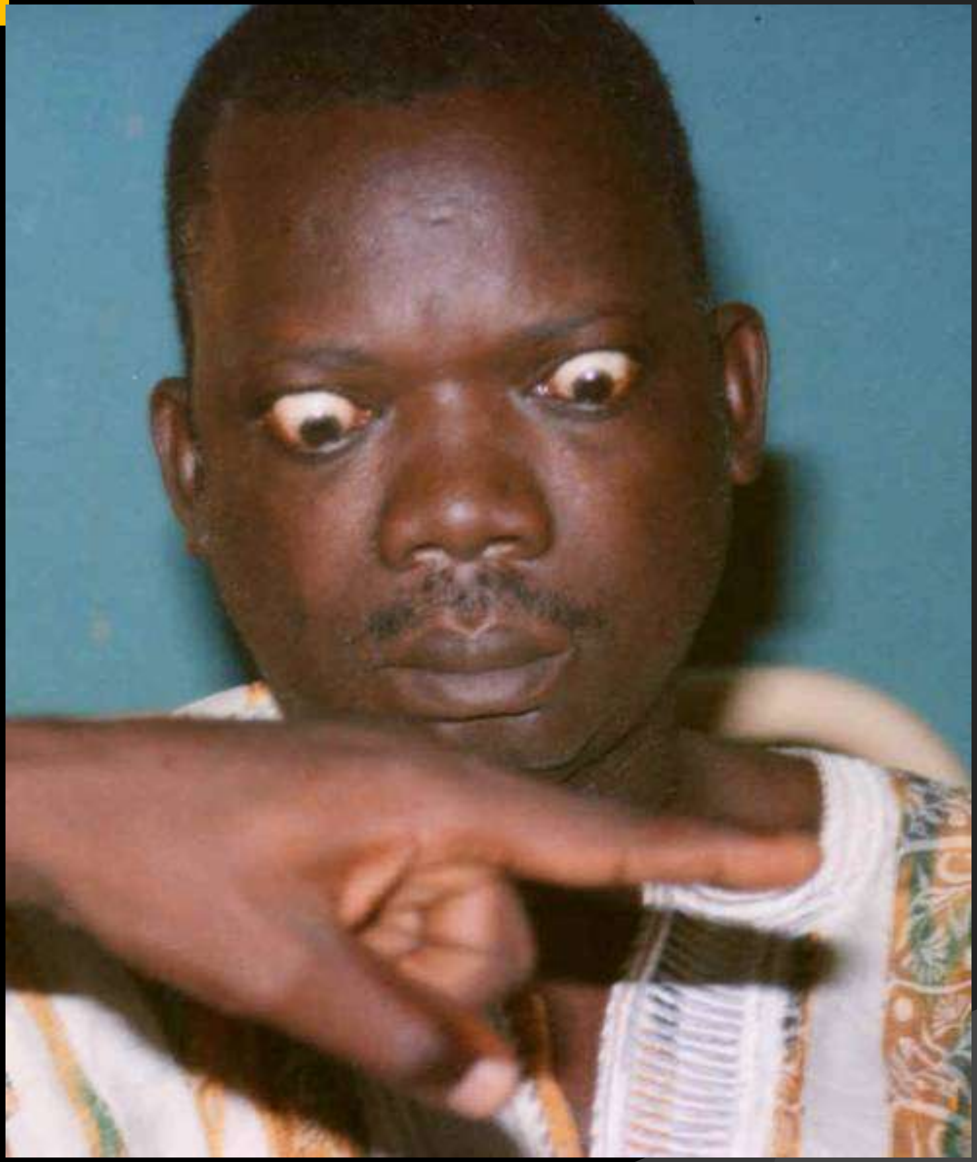
Upper part of the sclera is visible because upper eyelid is retracted backward ,



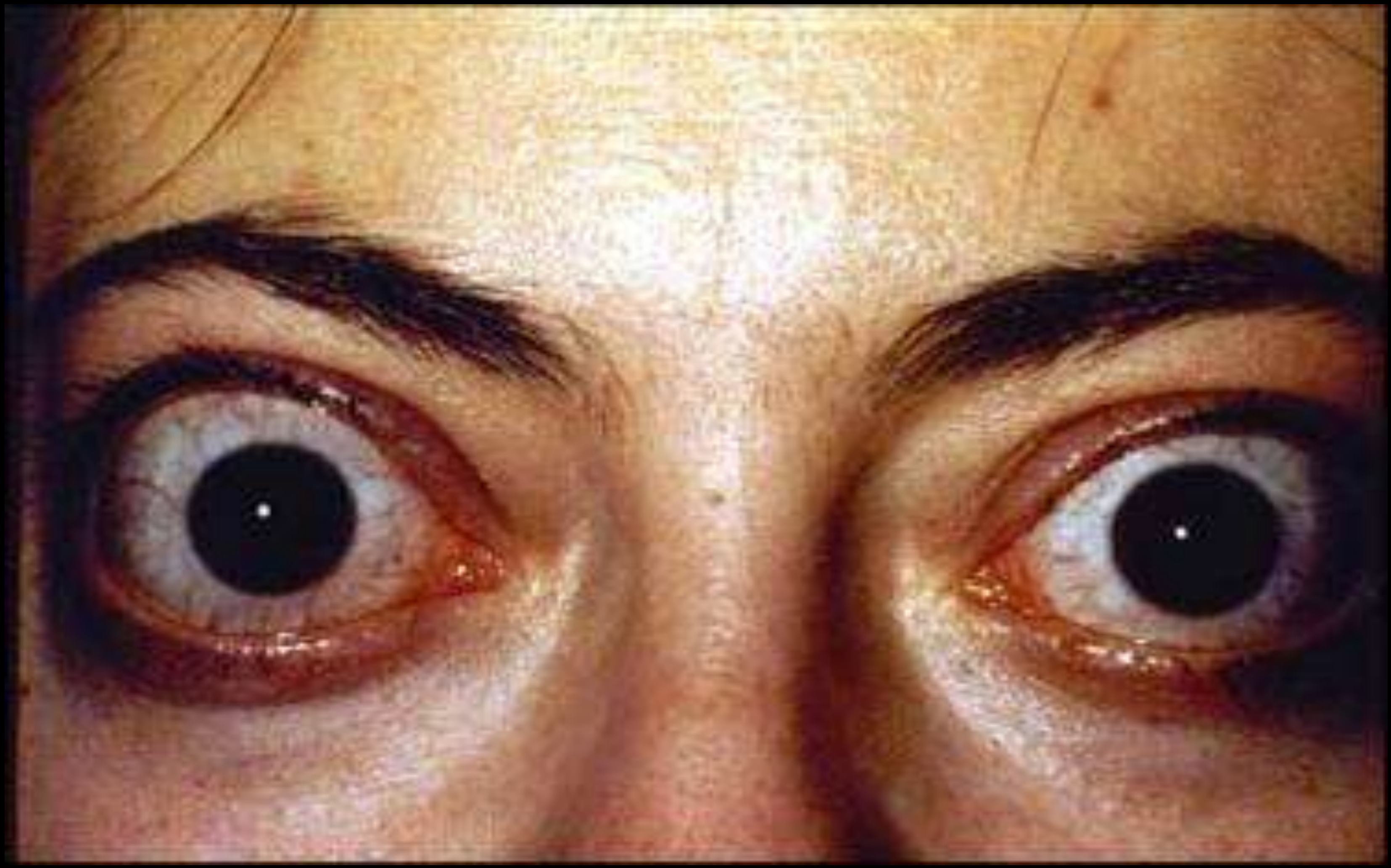
Lid lag
[Thyrotoxicosis]

delayed movement of the eyelid with the eyeball after moving something downward in front of the patient

✓



Exophthalmos
[Grave's disease]



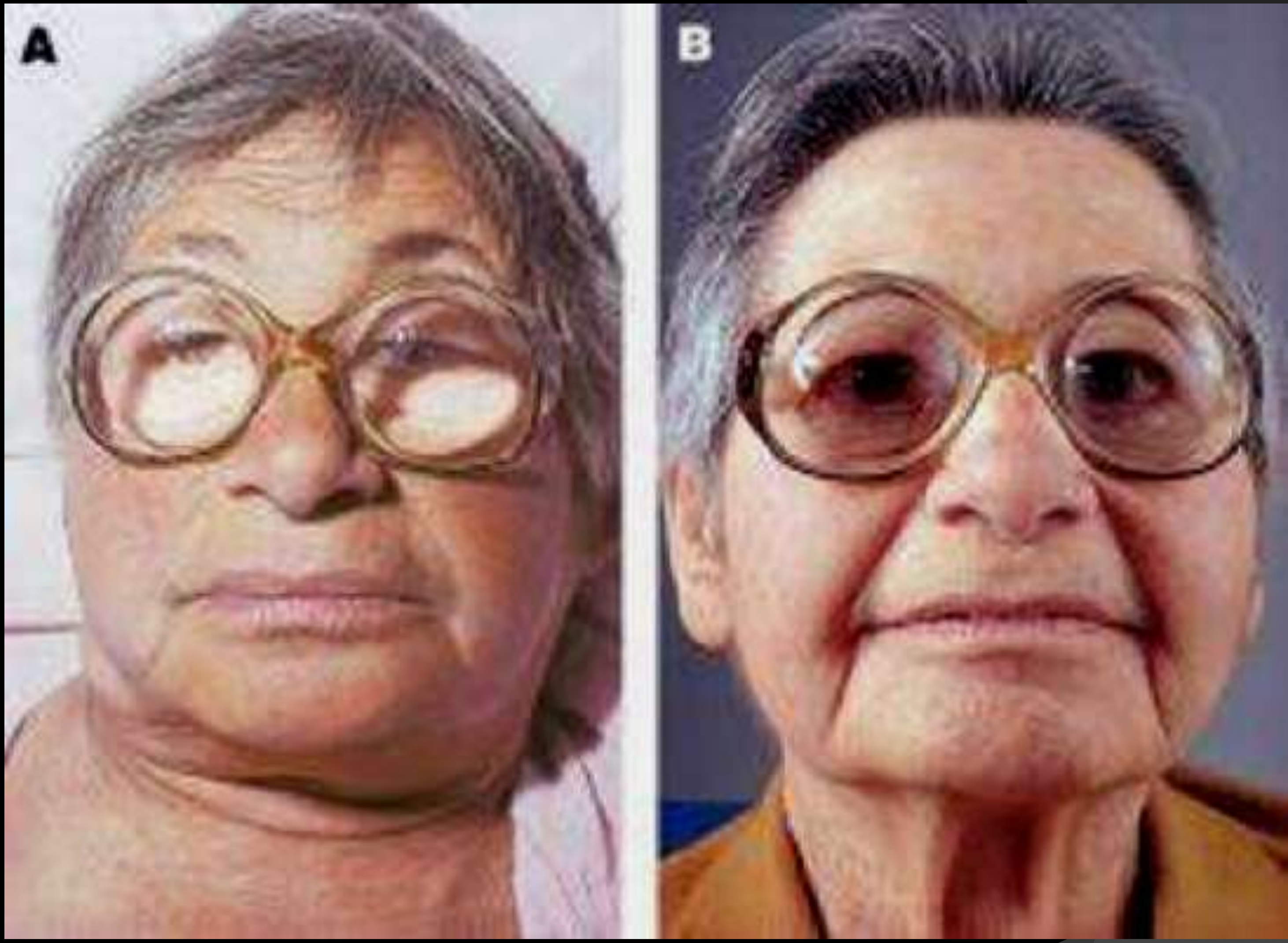
- A type of proptosis , detected by seeing forward eye balls protrusion in front of the supraciliary ridges from behind the patient , caused by accumulation of inflammatory tissues and cells in the retrobulbar space (a space behind the eye)
- , proptosis is called exophthalmos In thyroid disease ,
- Clinical features of Graves' disease (thyrotoxicosis) include : goiter , heat intolerance , excessive sweating , weight loss , palpitation , tremor
- Other causes (differential diagnosis) : tumor in the retrobulbar space or cavernous sinus thrombosis

Puffy apathetic face with coarse hair [Hypothyroidism, before and after treatment]

Clinical features of hypothyroidism : puffy face drowsy eyes and hair easily removed

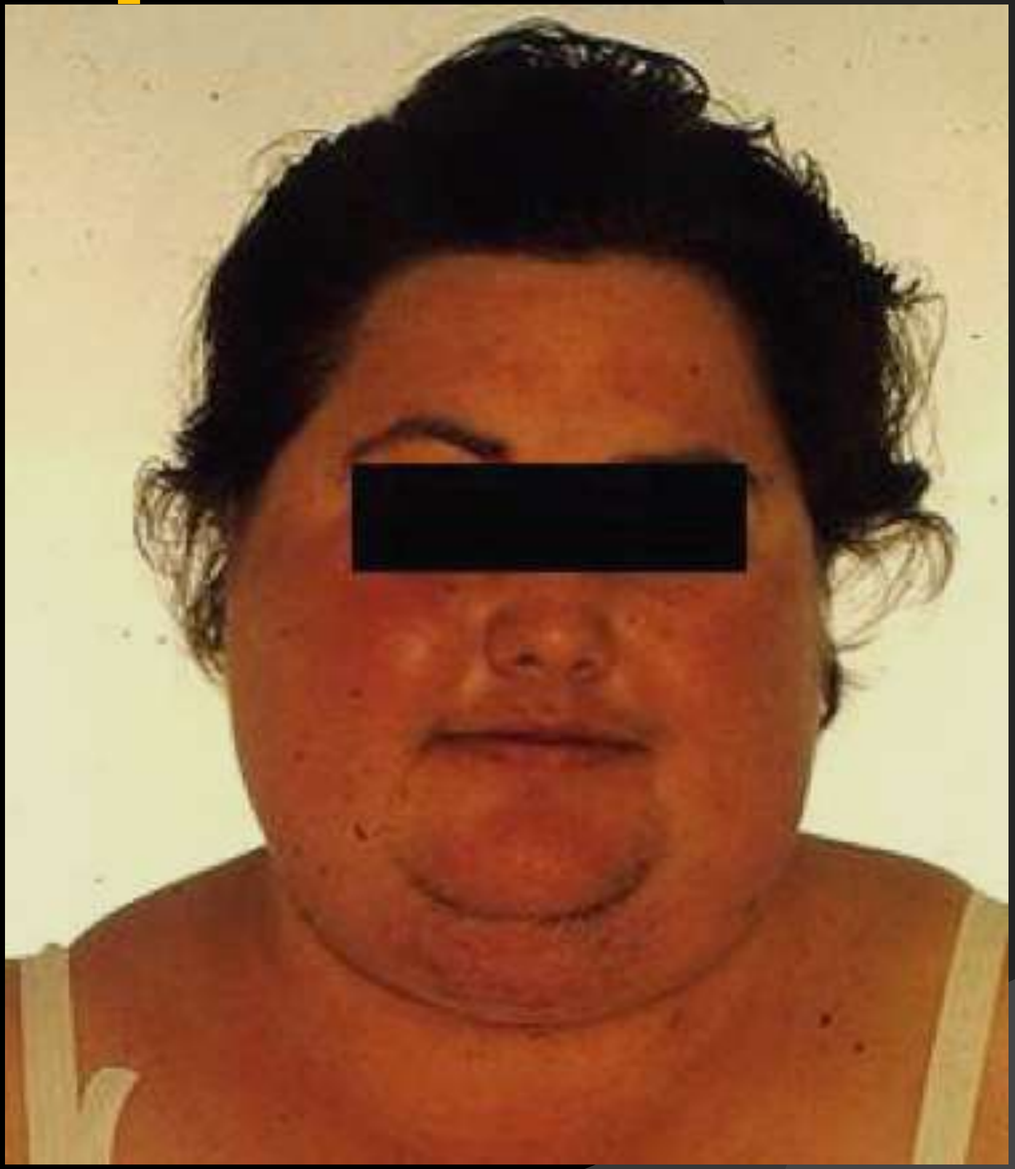
Slow movement , non biting edema , and thick skin

Other physical findings :cold intolerance , weight gain , bradycardia , non biting edema (non biting edema causes : myxedema as in hypothyroidism or elephantiasis which is seen in chronic lymph obstruction)



puffy eye

Moon face with hirsutism [Cushing syndrome]



Clinical features : moon face and flushing (pinkish discoloration) and hirsutism

Either Cushing syndrome (endogenous production) or excess exogenous glucocorticoids as in asthma or Rheumatoid arthritis

on the Skin : striae (hazy lines on the skin) specially in skin folds due to collagen and elastin destruction , totally irreversible in this case , either pinkish in Cushing , or white as in pregnancy ,

thinking of skin and easy bruising , hair loose in normal position

Metabolic : hyperglycemia , hypernatremia, Hypokalemia , and water retention , alkalosis

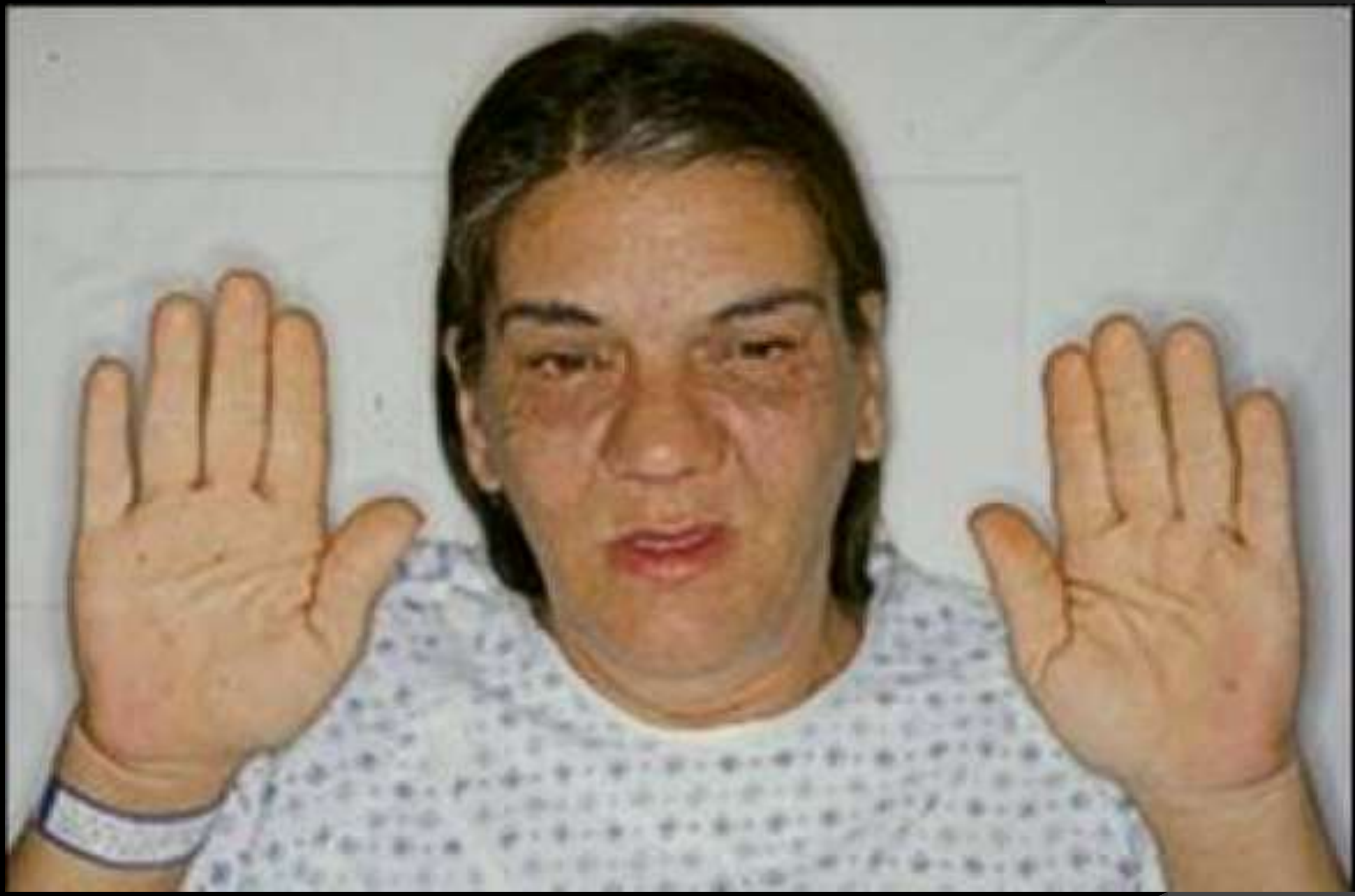
Coarse features of the face and bulky hands [Acromegaly]

G ← Puberty → A

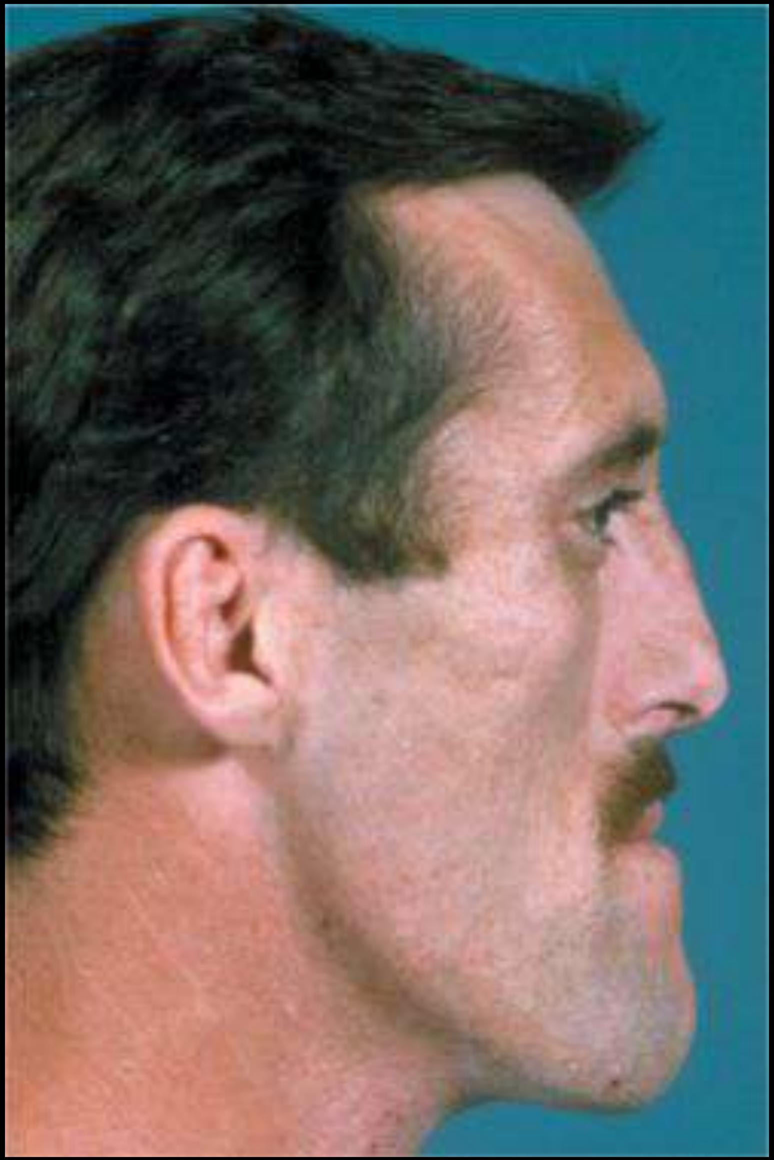
Excess GH before puberty is called gigantism while after that is called acromegaly

Clinical features of acromegaly :
Macrognathism , prognathism

Also clubbing in the finger and large extremities

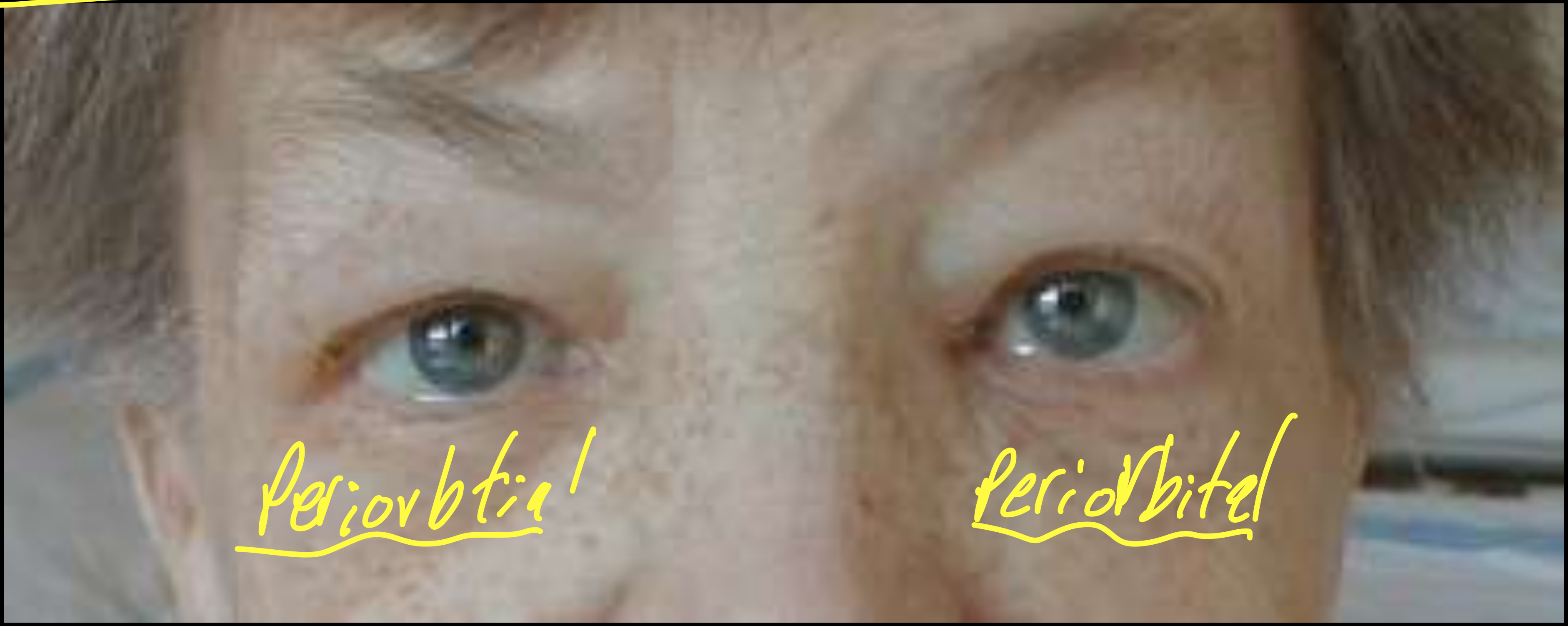


Proganthism (protrusion of lower jaw) [Acromegaly]



Puffy eyes

[nephrotic syndrome, hypothyroidism]



Swelling of the upper eyelid , also called peri-orbital edema.

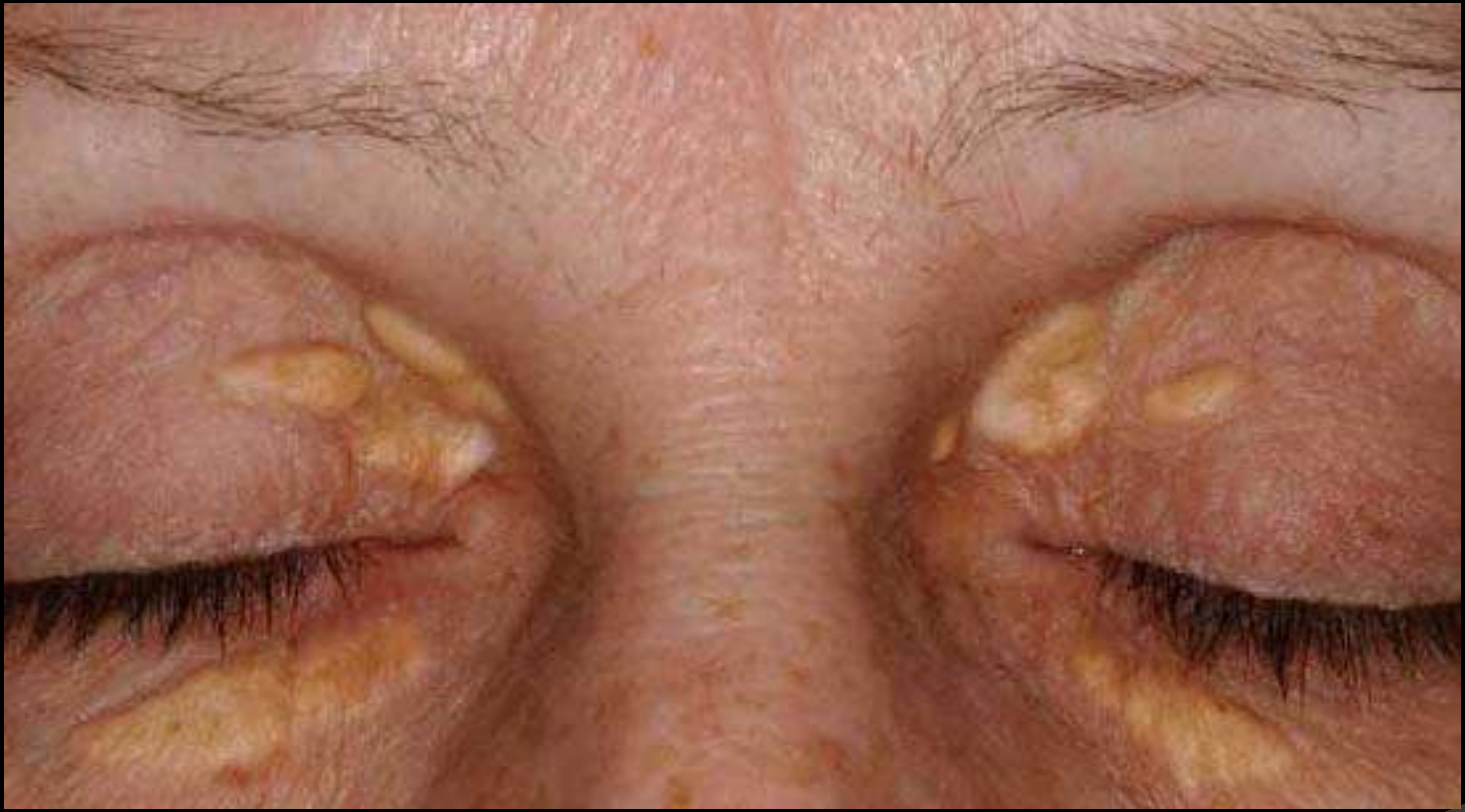
N + H

May be familial,

Edema due to Protein deficiency (nephrotic syndrome , liver failure ,) or allergy (drug or insect bit) or increased hydrostatic pressure (heart failure)

HF , LF , NS , allergy , familial ,

Xanthelasma [hypercholesterolemia]

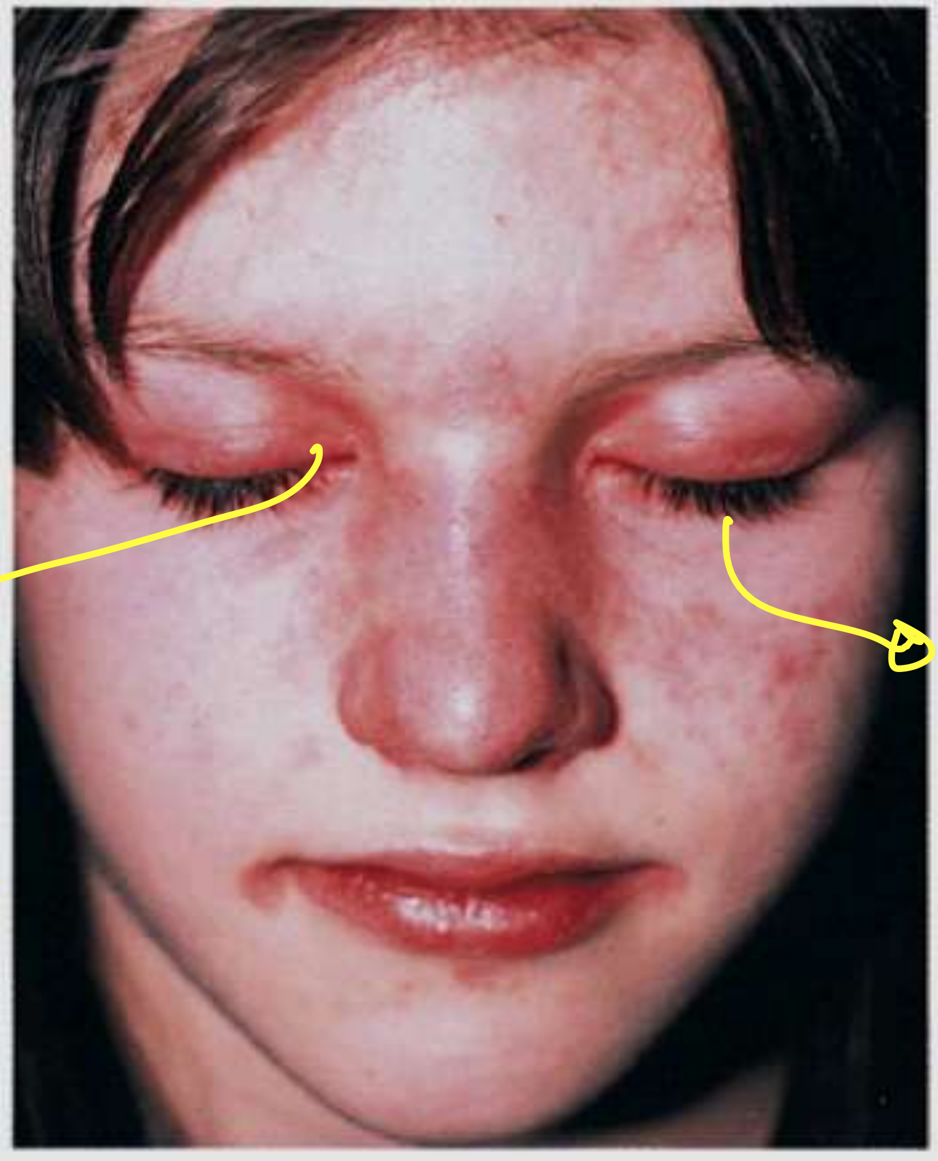


In the eye lid or in areas exposed to friction (elbows , knees)

eyelid , elbow , knees

Heliotrope rash (purple discoloration on the upper eyelids) [dermatomyositis]

- Hypercholesterolemia
- hyperthyrodism
- Hypothyrodism
- Nephrotic syndrom



purple discoloration

helitope rash

purple discoloration

Helitope rash

Pallor of conjunctiva [anemia]

Pallor : whitish discoloration of skin and mucous membranes

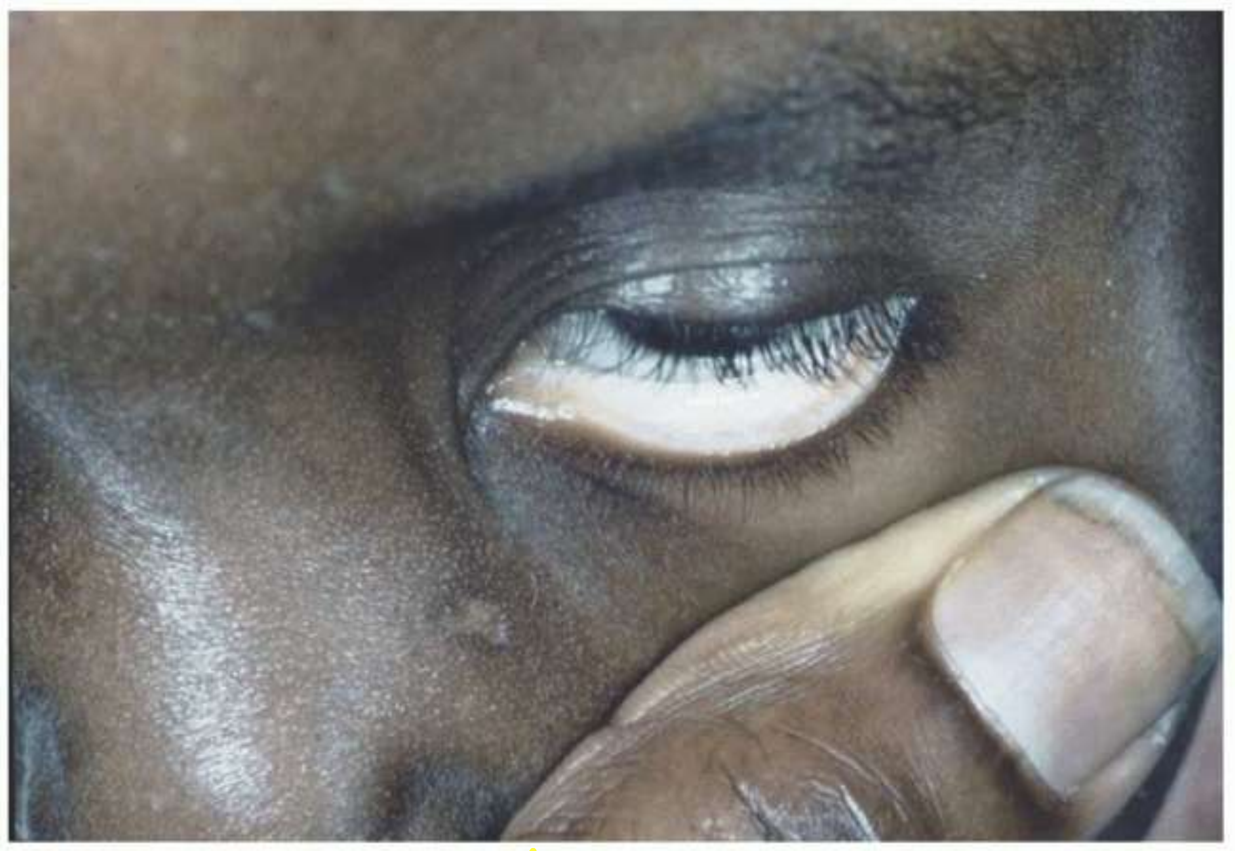
Skin , palmar creases or mucous membrane (like conjunctiva in the Lowe eyelid , mucosa under the tongue)

Causes :

① Anemia , ② hypovolemic shock , ③ sever cold exposure , ④ anxiety , ⑤ hypopigmentation like in : ⑥ vitiligo (autoimmune destruction of melanocytes) , ⑦ albinism (genetic deficiency)

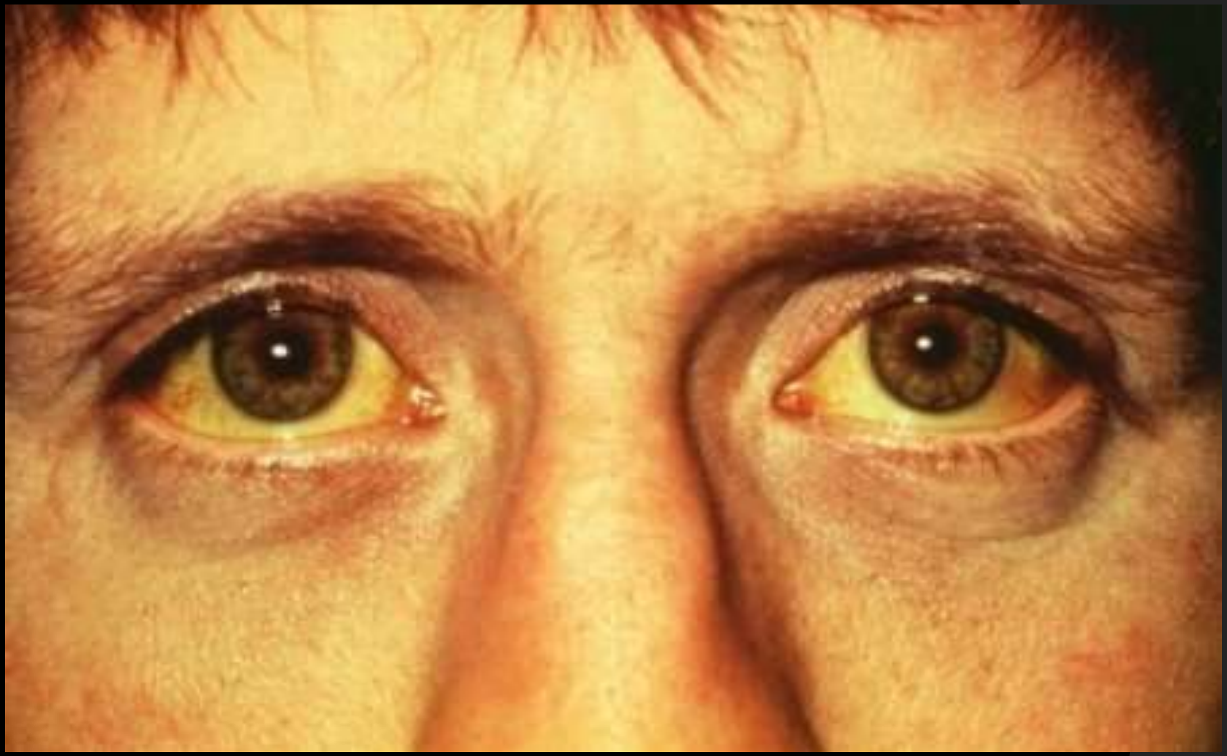
drugs for HF called beta pallor (⑧ metoprolol) ,

Color of skin is determined by : blood perfusion and melanin concentration



Blood
melanin } — color of skin

Yellowish discoloration of the sclera and skin
[jaundice]



Yellow discoloration of the sclera and skin

Jaundice : (can be caused by liver failure and hemolytic anemia and cholestasis)

Clinical jaundice : yellowish discoloration of skin , and sclera and mucous membrane

Also caused by quinine drug

Laboratory jaundice : concentration of bilirubin is more than 3 (normal is 1)

Hypercarotnemia may cause yellowish skin discoloration but with no sclera discoloration

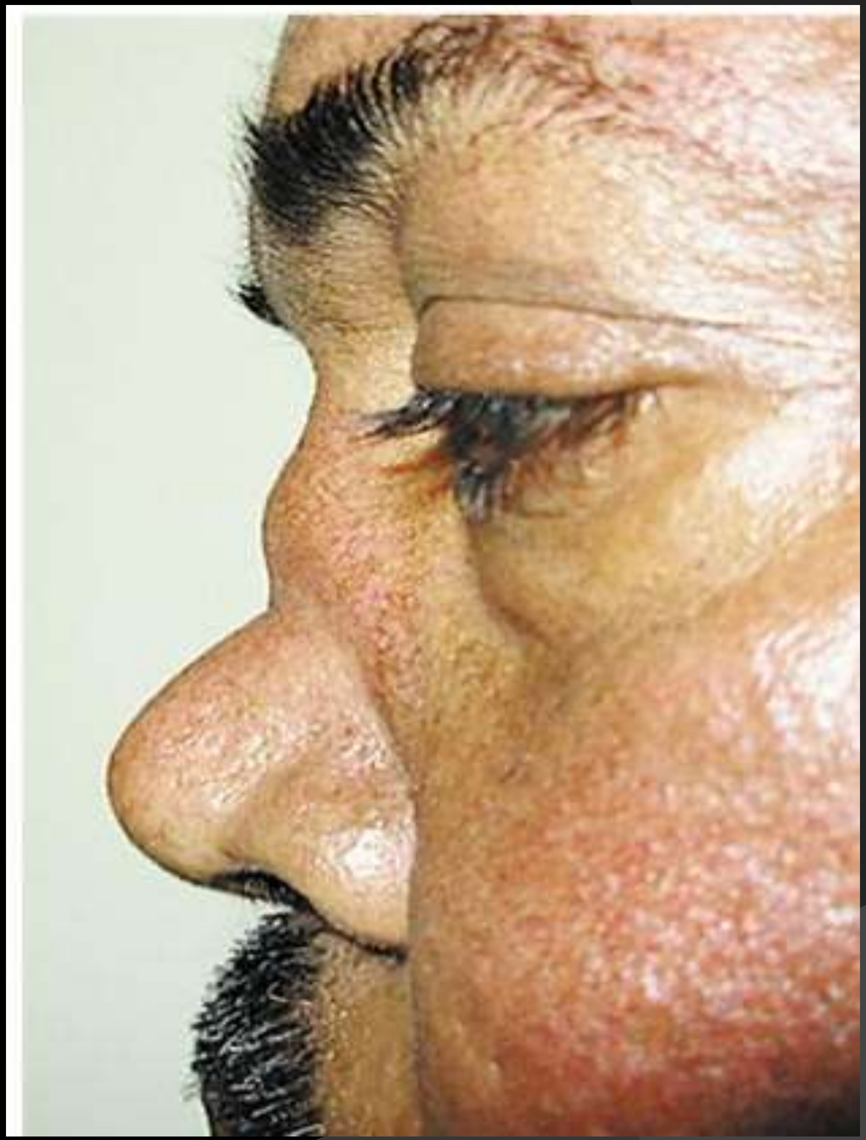
Saddle nose [Wegner granulomatosis]

Saddle nose

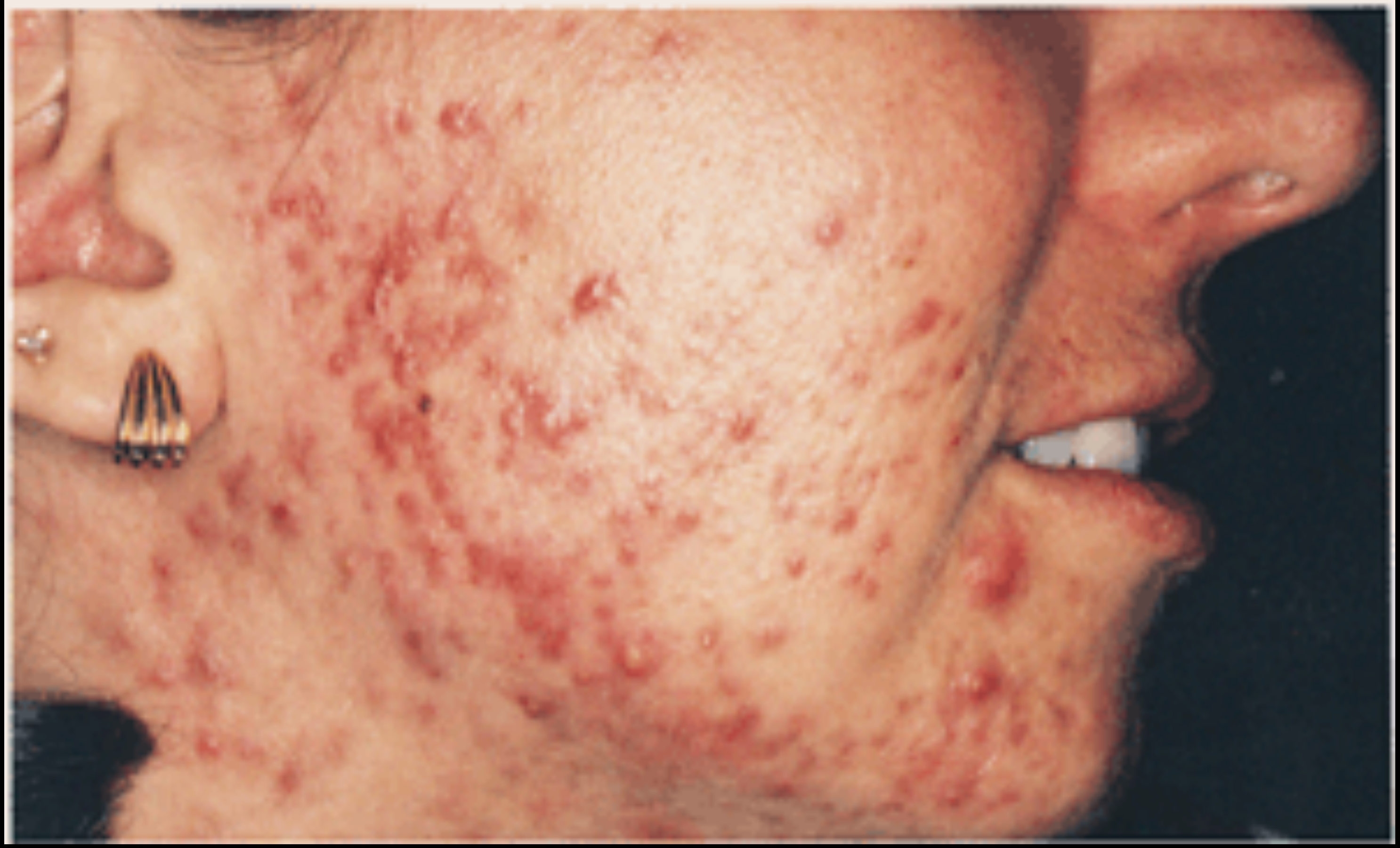
Saddle nose : collapse of the nasal bridge

Causes :

Traumatic , wegener's granulomatosis and sarcoidosis , as well as syphilis and leprosy .

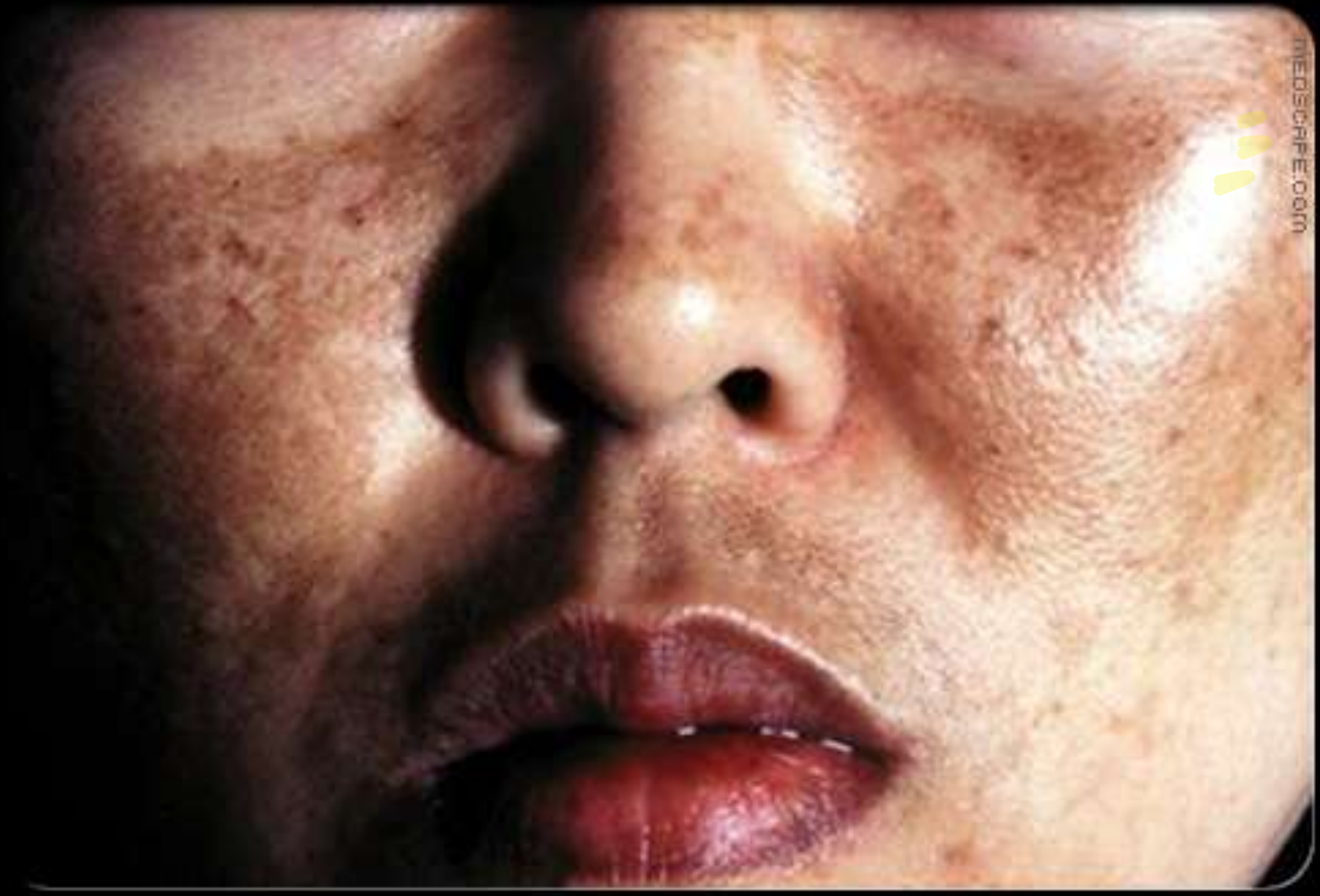


Papules, pustules and comedones [Acne vulgaris] (adolescence, steroid therapy)



Acne causes : idiopathic , hormonal (Cushing , polycystic ovarian syndrome) , or drugs like oral contraceptive pills

Melasma
(symmetric brown patches on the face)
[pregnancy, oral contraceptive]



Melasma

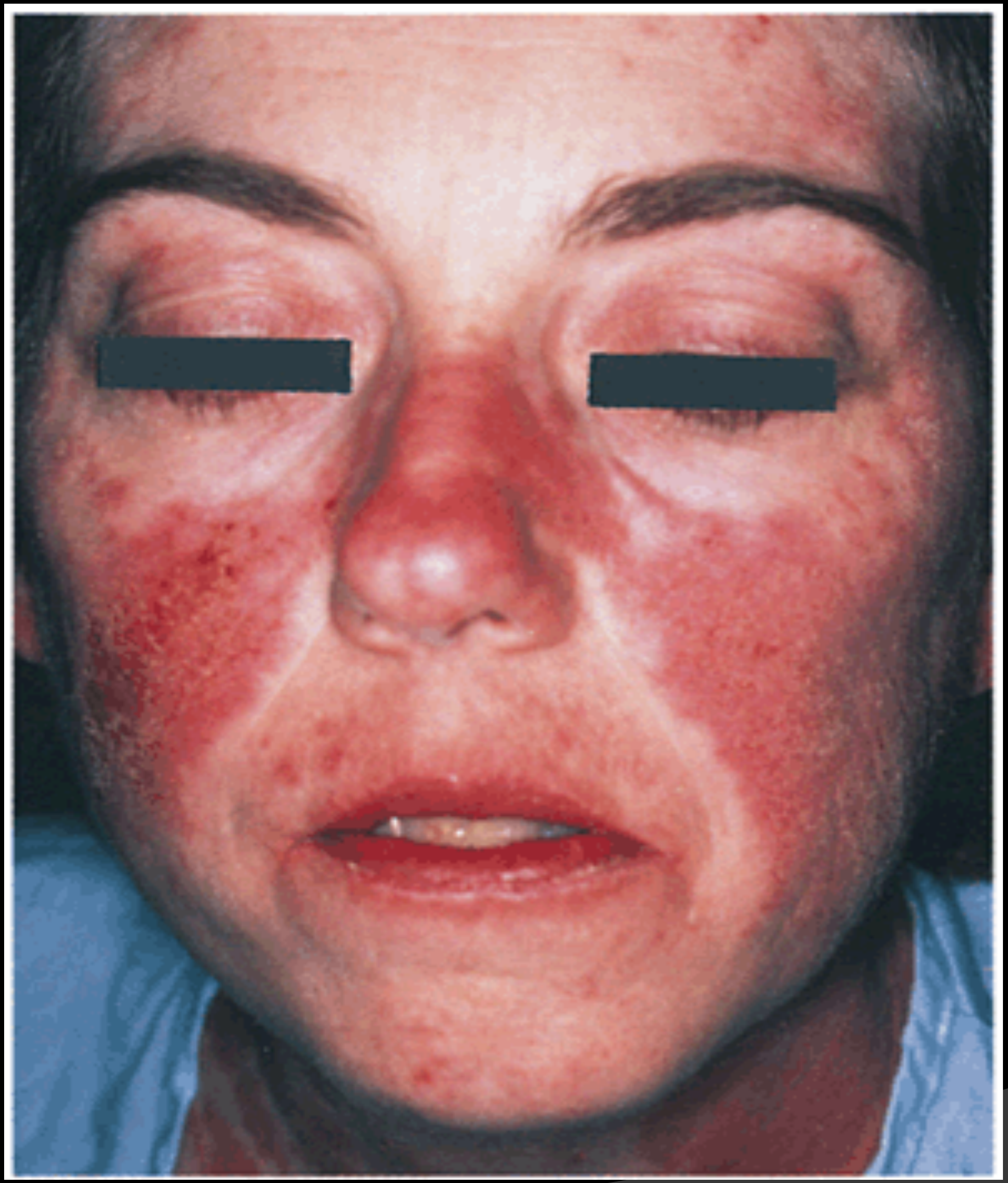
Melasma : reversible

Chloasma : irreversible

Chloasma

erythematous plaque over the nose (butterfly rash)

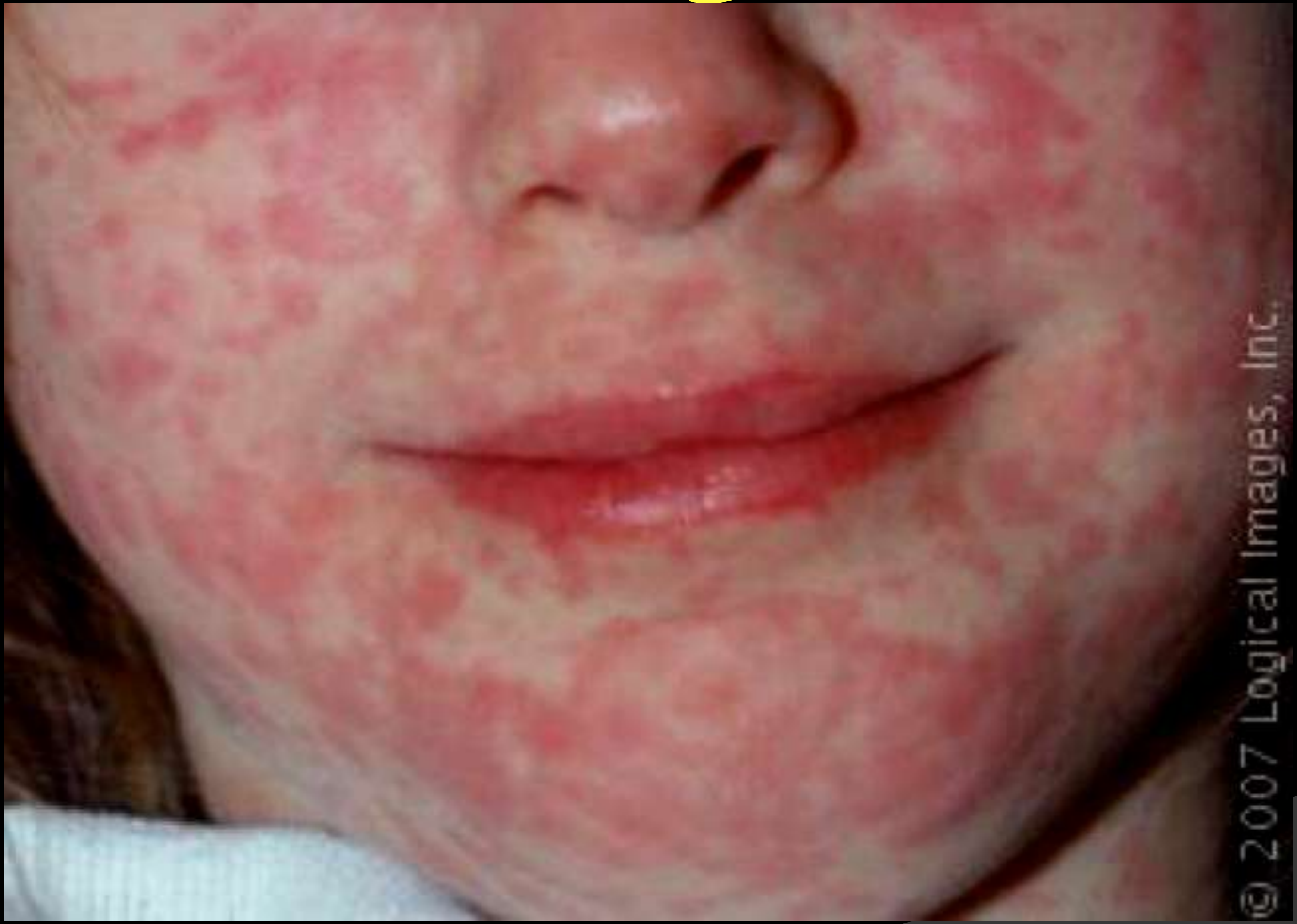
[SLE]



Maculopapular rash [measles, drug eruption]

انفجار

حصبة مخدرات



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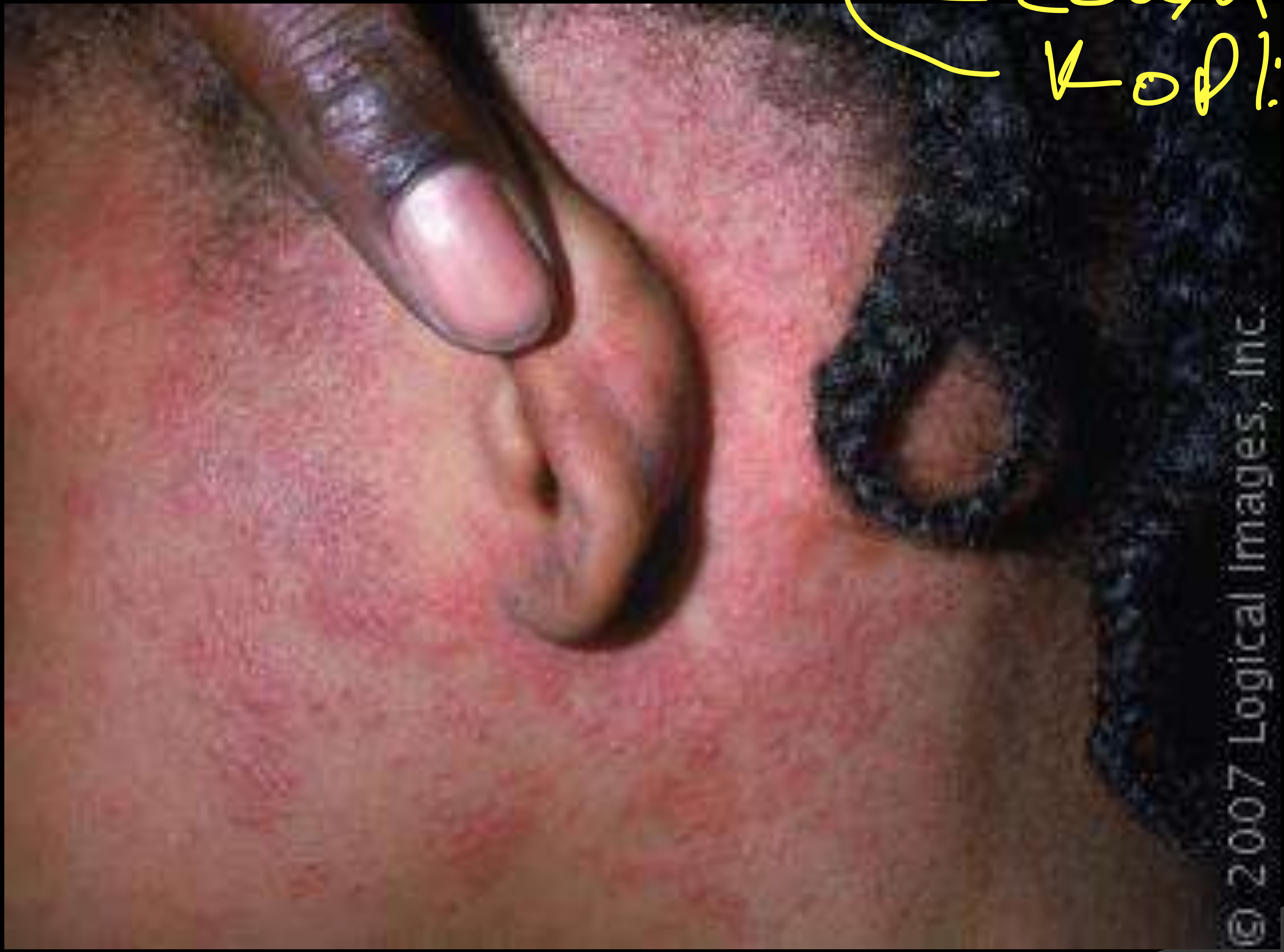
Maculopapular rash :

- Papule : rounded , elevated
- Patch : rounded , flat
- Pastule : vesicle with pus
- Measles clinical features :
- Maculopapular rash on the face , associated with fever , cough , Coryza (inflammation of the mucous membrane of the eye and the mouth) ,
- Pathognomonic (a distinctive feature of this disease) sign : whitish lesions in the mucous membrane of the mouth called koplik's spot (in the early stages)
- And involvement of the post auricular area (behind the air) by the rash

fever
MP Rash
cough

Maculopapular rash behind the ear [measles]

- maculopapuler rash
- fever
- cough
- Koplik spot



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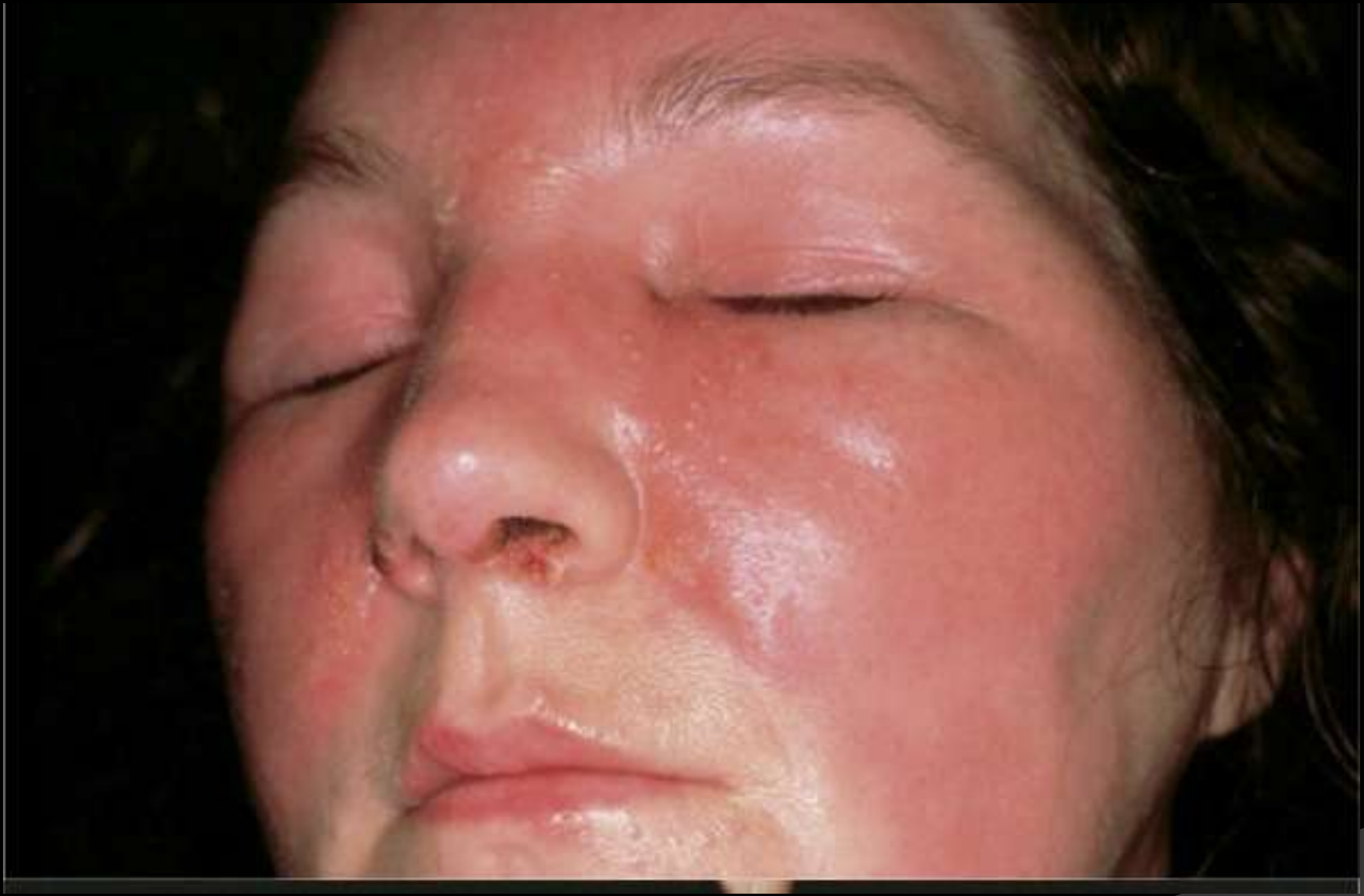
Erythema and edema of the face [Erysipelas / streptococcal infection]



edema
erythemia

- Erythematous discoloration with swelling of the Cheeks and the eye
- Causes of Swelling of the face (differential diagnosis) : infection of the face (streptococcus erysipelas associated with hotness) , allergy (can be systemic called anaphylaxis which leads to hypotension and tachycardia and bronchospasm , the allergen maybe perfume , insect bite , food like peanut , strawberry , kiwi , first exposure is the severest) caused by histamine , hypoproteinemia from renal system causes (nephrotic syndrome) specially seen in the morning , or GIT (protein loosing enteropathy like celiac disease) or poor intake (kwashiorkor) of liver ✓ problems or heart failure
- (Q/ lethal complication or cause associated with edema of the face, A / anaphylaxis)
- Puffiness of the face doesn't necessarily mean edema (fluid) but maybe fat

Periorbital edema [angioedema, hereditary or IgE dependent]

May be allergy (like shellfish allergy)!

Differential diagnosis : anaphylaxis , IgE overactivation

Treatment :

Stops the allergen exposure (clean the patient , tie the limb in case of bite , stop giving drugs like penicillin if they are the cause)

Depending on the severity of the allergy we give

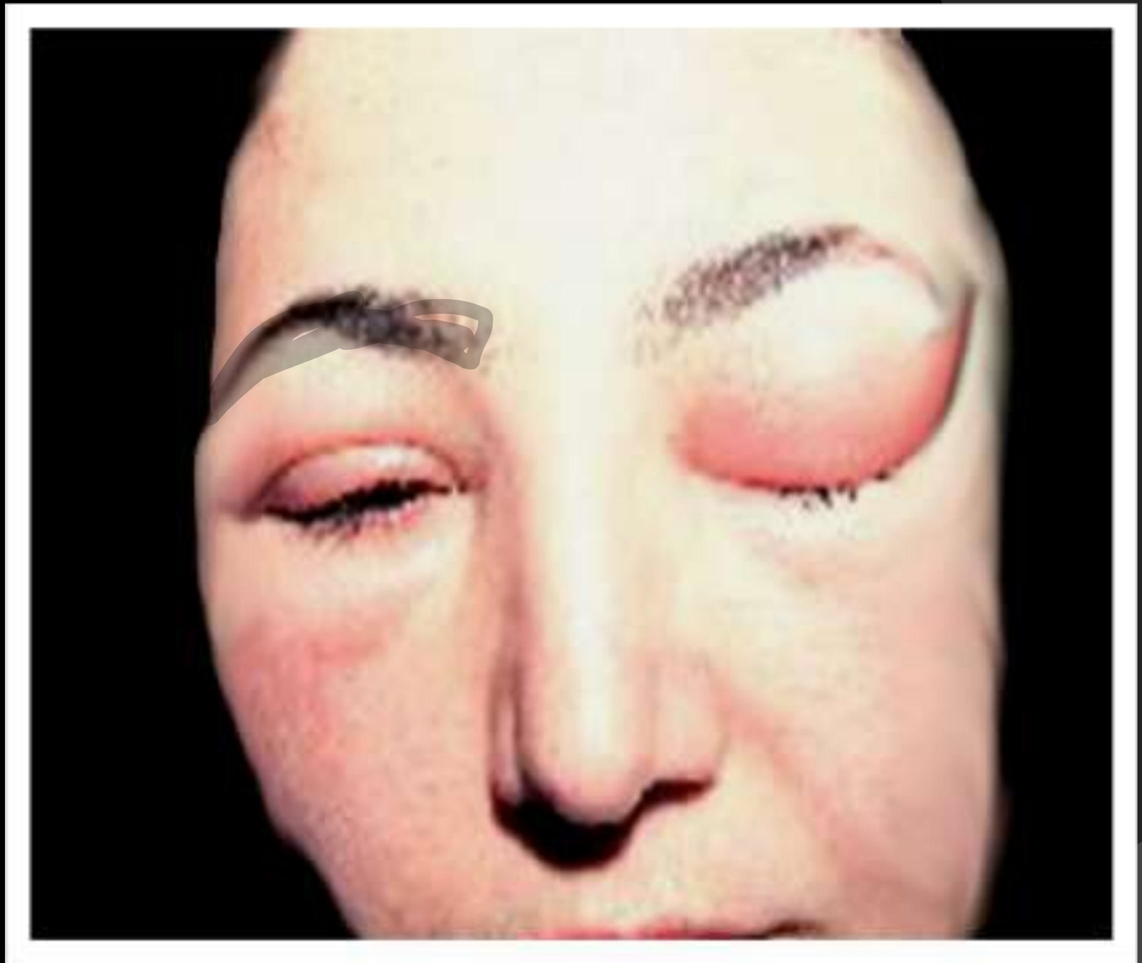
1- anti-histamine (allermin (diphenhydramine) , injection)

If no benefit we give

2- Steroids (hydrocortisone for example , injection)

If no benefit we give

3- adrenaline I.M , drug of choice in anaphylaxis

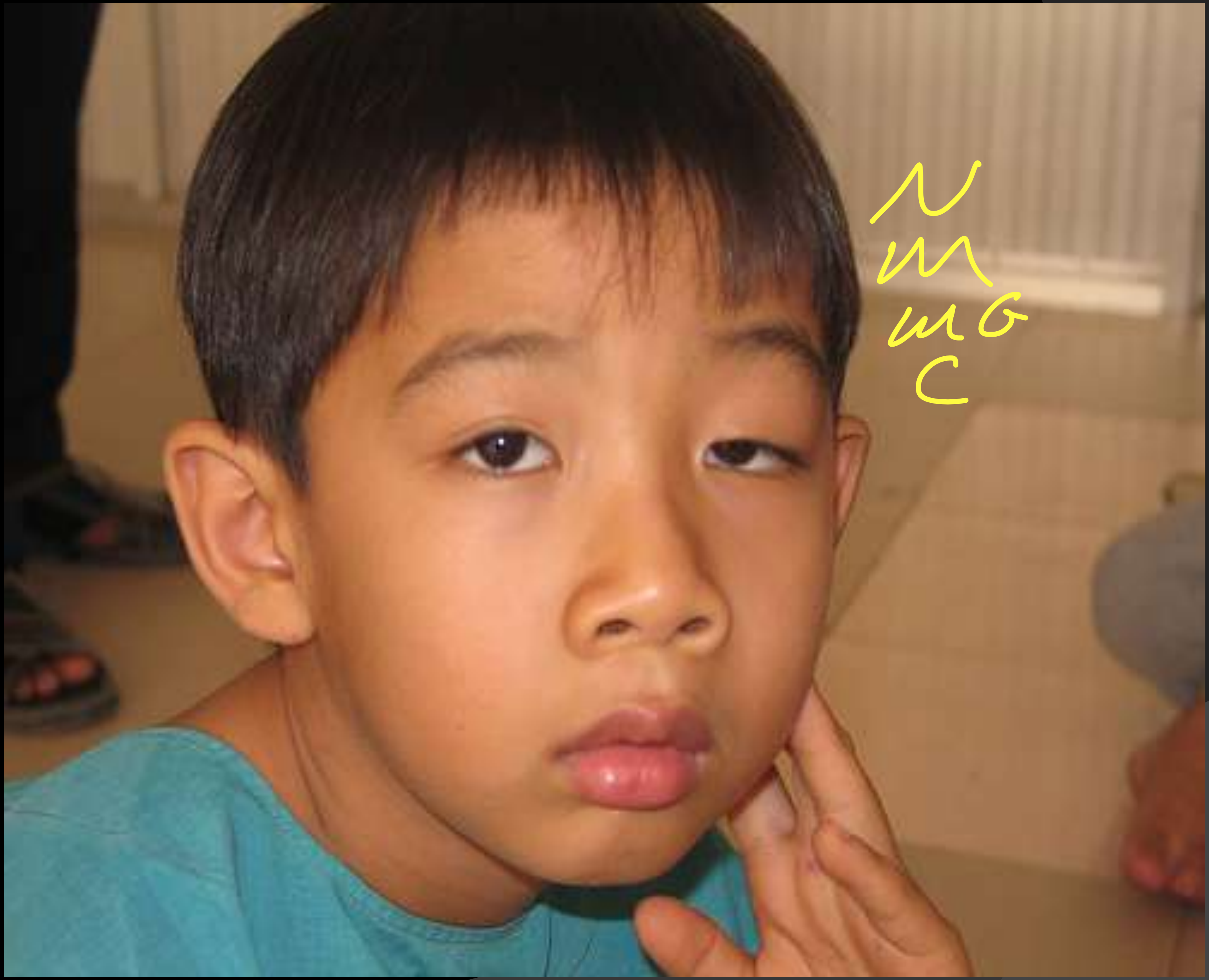


Unilateral ptosis
[Congenital, Myasthenia gravis]

Un li
l P S m

Dropping of the eyelid

Causes : congenital , cranial nerve palsy , myotonic dystrophy (the problem is in the levator palpebrae superioris muscle , myasthenia graves



N
M
MG
C

Bilateral ptosis

{before and after edrophonium (tensilon) test}

[Myasthenia gravis]

Antibody against Ach receptor in the neuromuscular junction

ACH

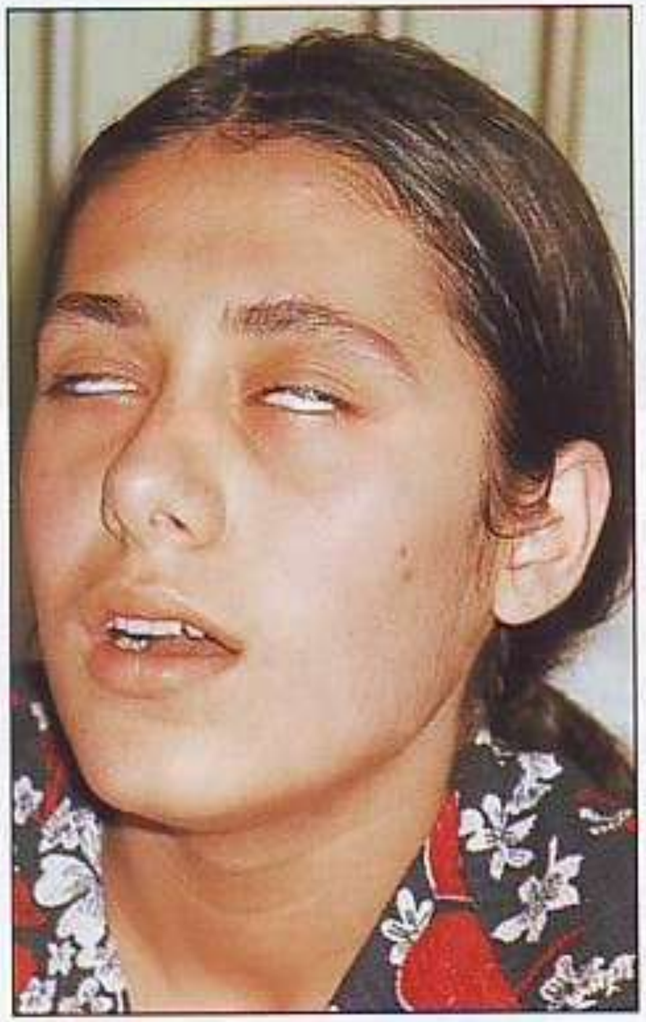
Treatment : we give cholinergic agent called neostigmine , or we put cold gauze on it (antibody destroyed in the coldness) , Q / mention a skin confirmatory test A: cold pack test

Mention medical drug for the treatment : neostigmine

Note :

bells phenomena differs from ptosis (when we ask the patient to close his eye , he can't do it , Orbicularis oculi muscle problem)

11.130



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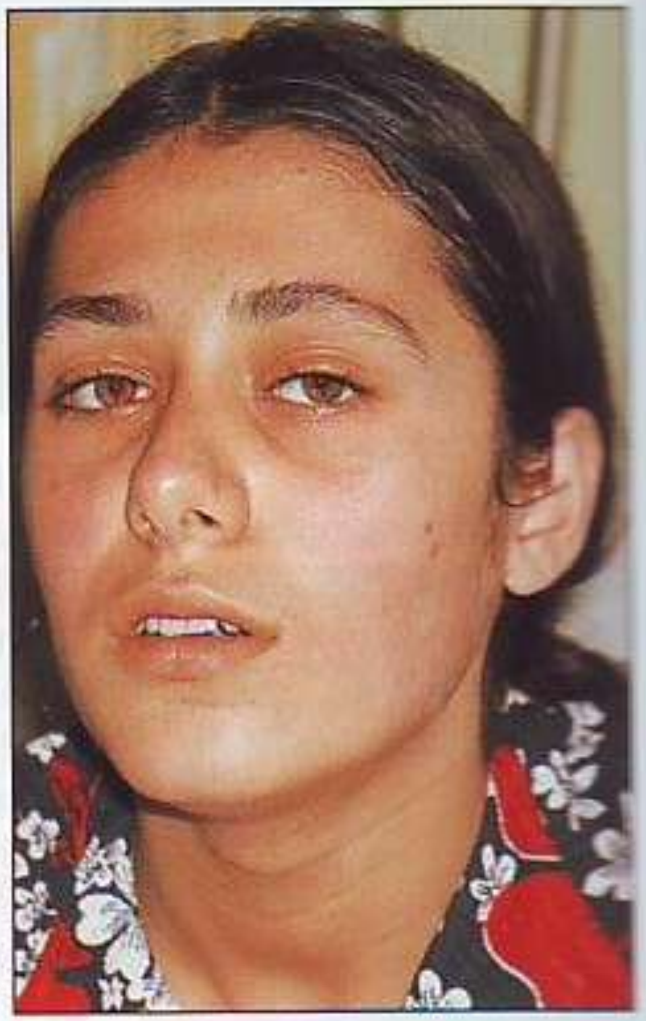
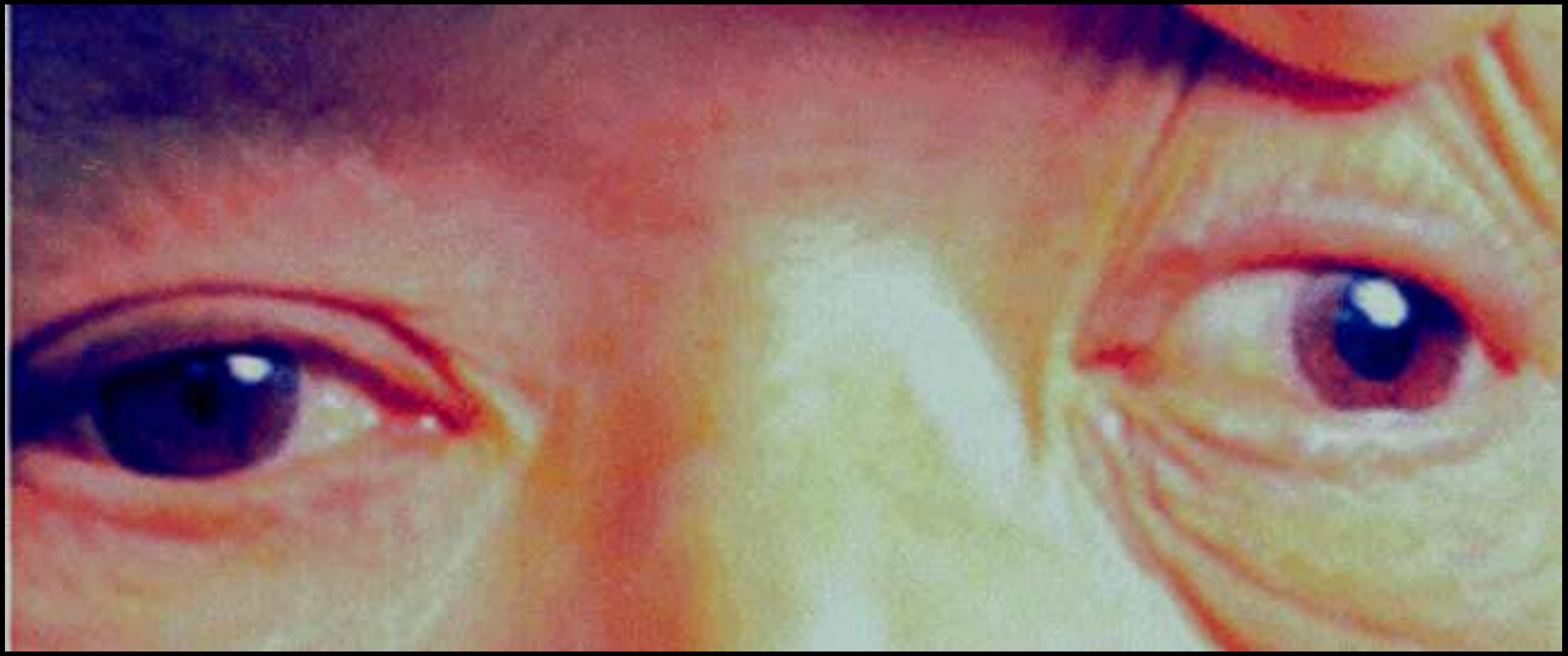


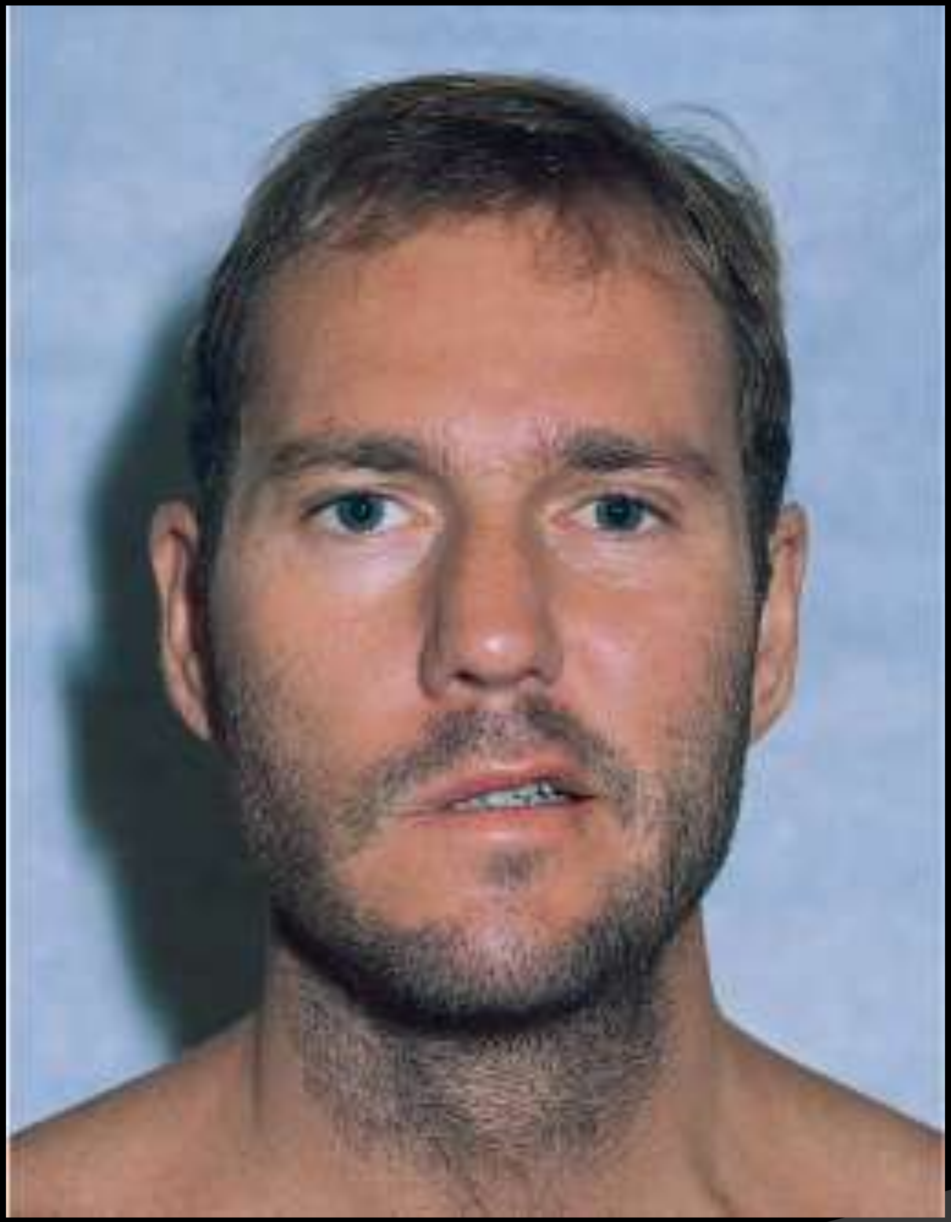
mg → Ach

Ptosis, divergent squint and dilated pupil [Oculomotor nerve palsy]



Flat nasolabial fold and inability to show teeth in the right side

[right UMN facial nerve palsy]



Chvostek's sign [hypoparathyroidism].

Ca : 9-10.5 normally

Hypocalcemia leads to up-normal muscle contraction

If Mild , focal contraction like chovestic sign

If Sever , general fit

Causes :

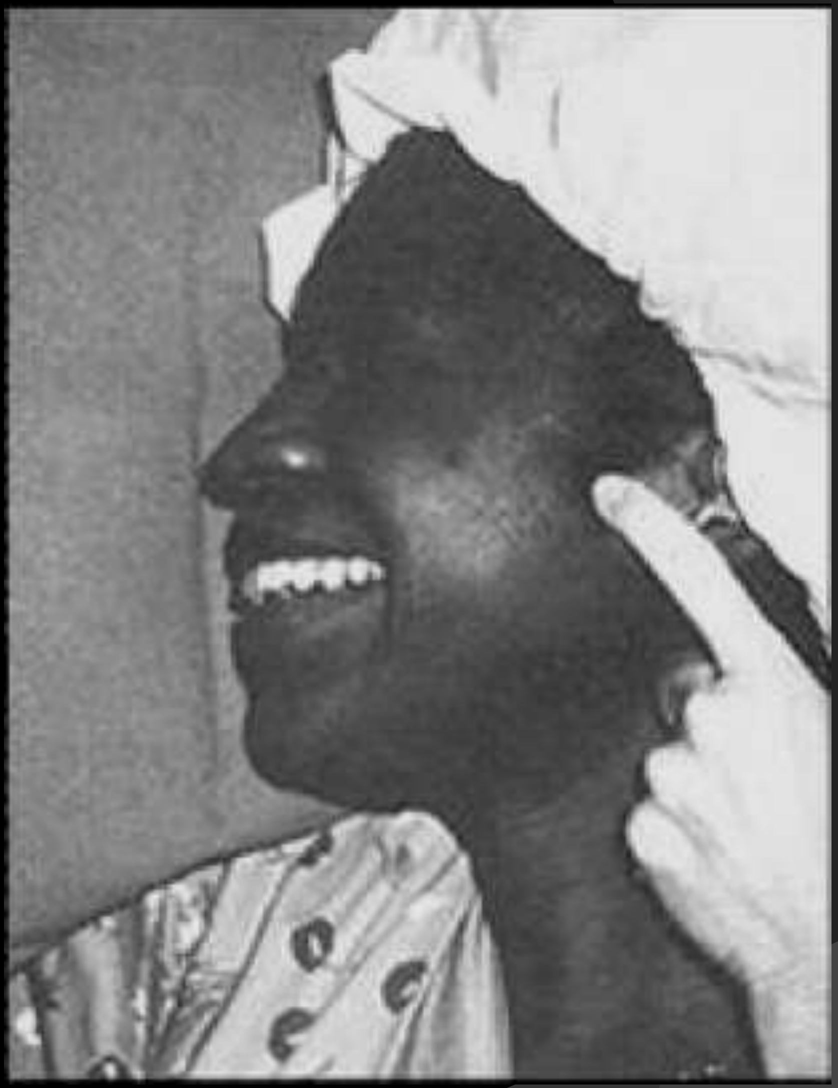
Hypo-parathyrodism (most common cause of it is after thyroid surgery , because The parathyroid glands are also removed with the thyroid)

Sever vitamin D deficiency (lack of sun exposure or malnutrition)

Frequent blood transfusion (so we give Ca with it)

Also Hyperventilation may induce hypocalcemia --- rapid CO2 removal ---- alkalosis --- hypocalcemia

To treat patient with psychological hyperventilation we make him breath by a bag (to decrease CO2 loss ; giving O2 is wronge)



* D ↓
* thyroid surgery

mild face
more sever m
most sever

Pallor of the lips [anemia]

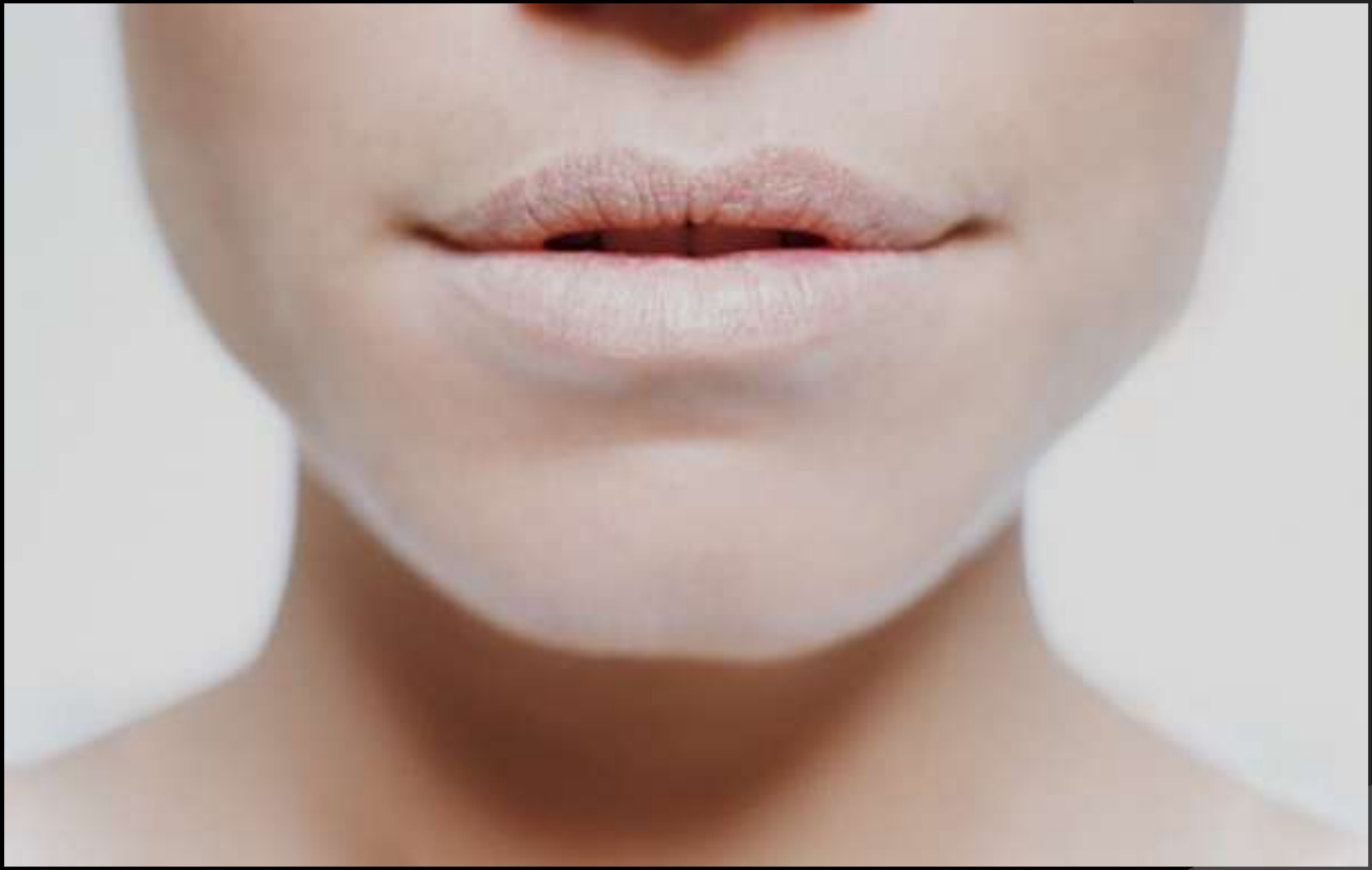
Anemia stages :

Mild : on the face

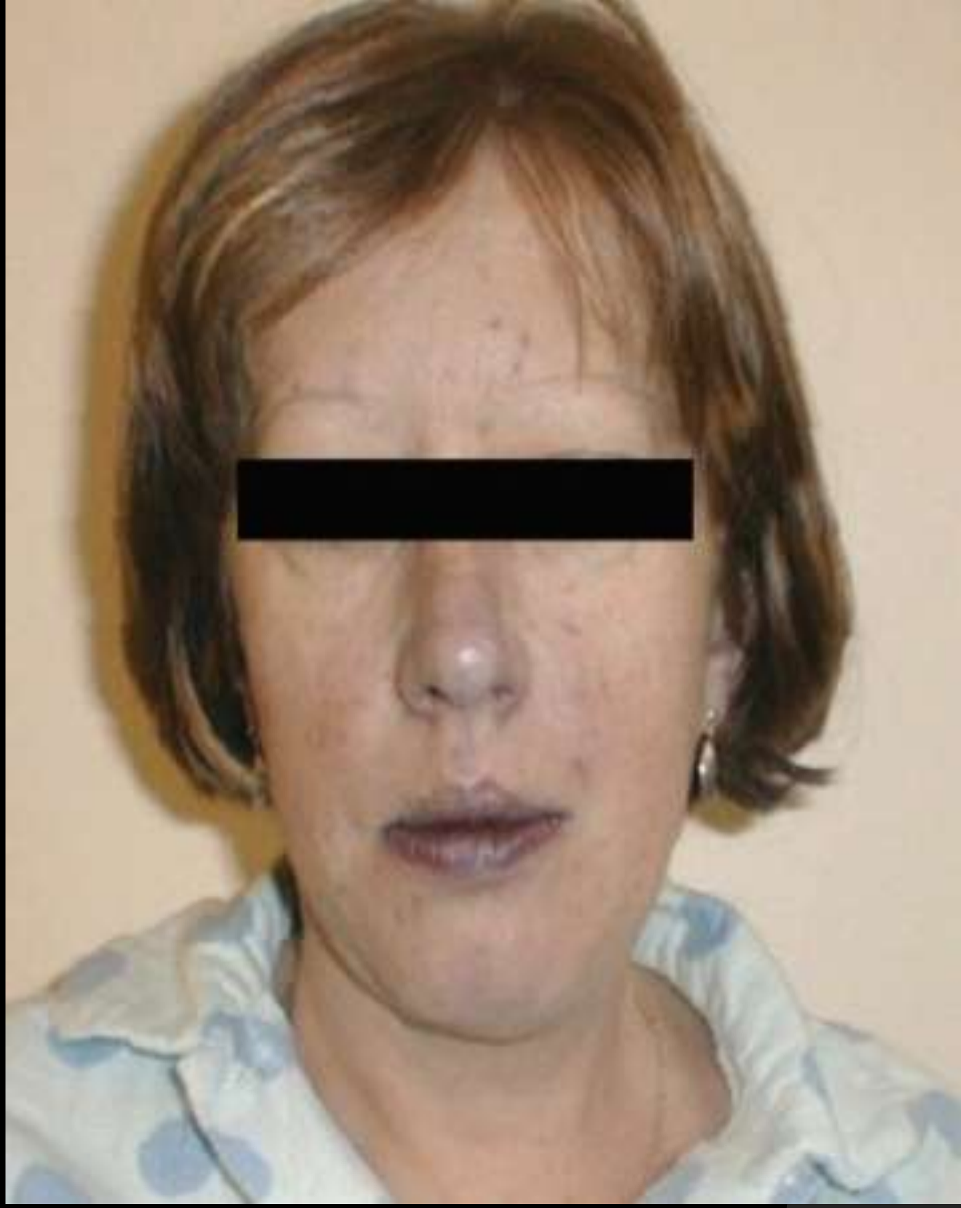
More sever : mucous membranes

Most sever : skin creases , less than 7 HB

…….



Bluish discoloration of the lips [central cyanosis]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Central cyanosis : tip of the tongue and the lips ,

Causes

1 Cadiac : cyanotic heart disease (TOF tetraology of fallot , tricuspid atresia , total anomalous pulmonary venous return ,transportation of the great vessels)

2 Any Sever lung disease

3 Hemoglobin disorders :

Methemglobin

Sulphemoglobin (both heridatry)

4 CO posioning (also with erythema , treatment is O2 high flow , O2 doesn't cause any problem in any patient except in COPD if given in high flow may damage the alveoli);

Peripheral cyanosis :

Extremities , tip of the nose :

Causes : PVS (peripheral vascular disease) , arterial blockage

1 2

* cynosis central

* Perphral cyanosis

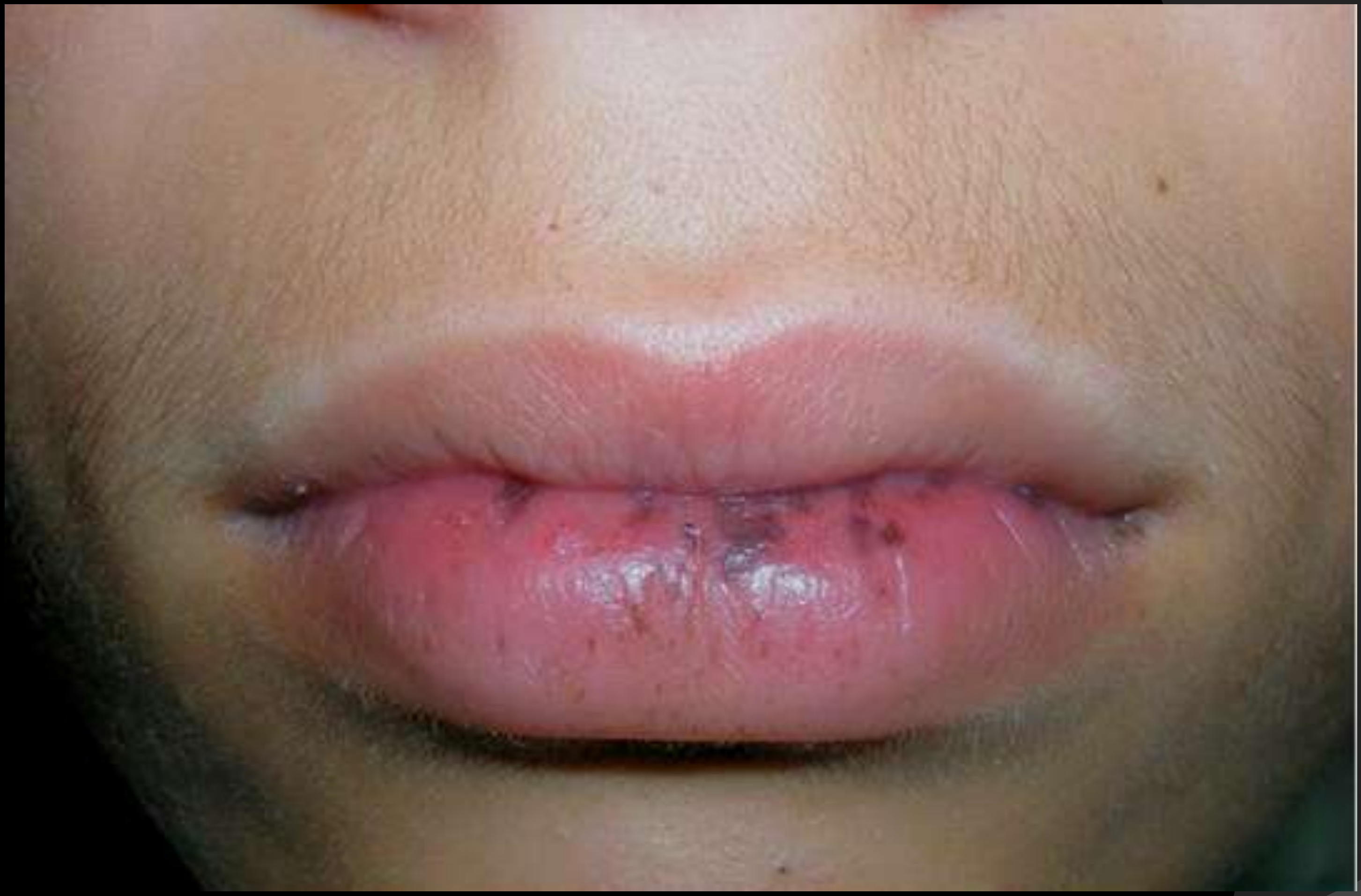
E

nose

Dark brown spots on the lips [Peutz- Jegher’s disease]

P J D

مرض بوتز-جيغرز



P.J.D

Lips , mucous membranes and the lips are usually discolored in Addison disease

Other features :

Recurrent hypotention and syncopy

Hypotanriemia , hypoglycemia , hyponatriemia , hyperkalemia

Aphthous ulcer

[idiopathic, Behcet disease, IBD, HIV infection]

Seroius vs benign

Benign :

7 days or less and not recurrent with no fever or pain

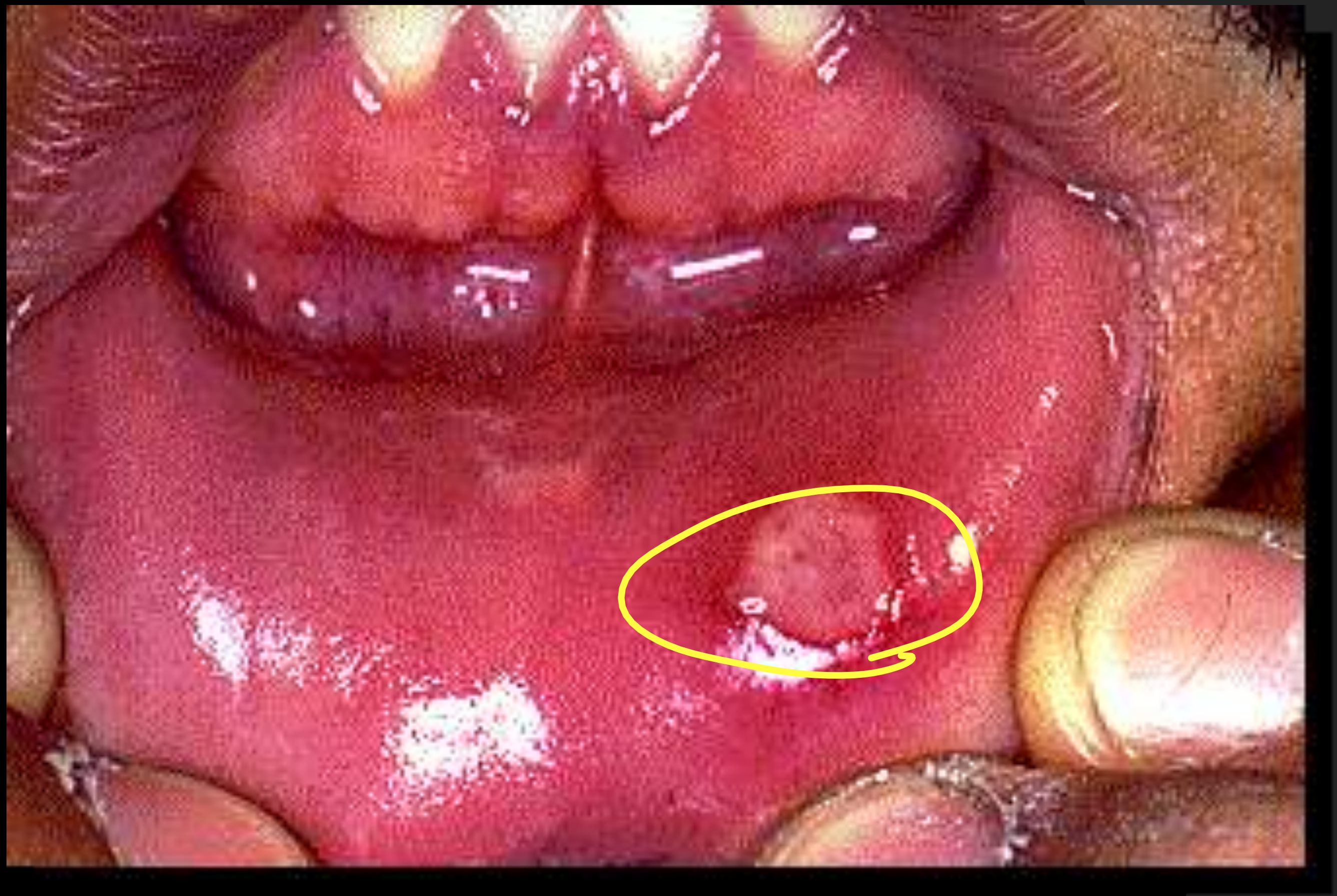
Causes :

Idiopathic (most common) , SLE , IBD (ulcerative colitis and crohn's disease)

Serious :

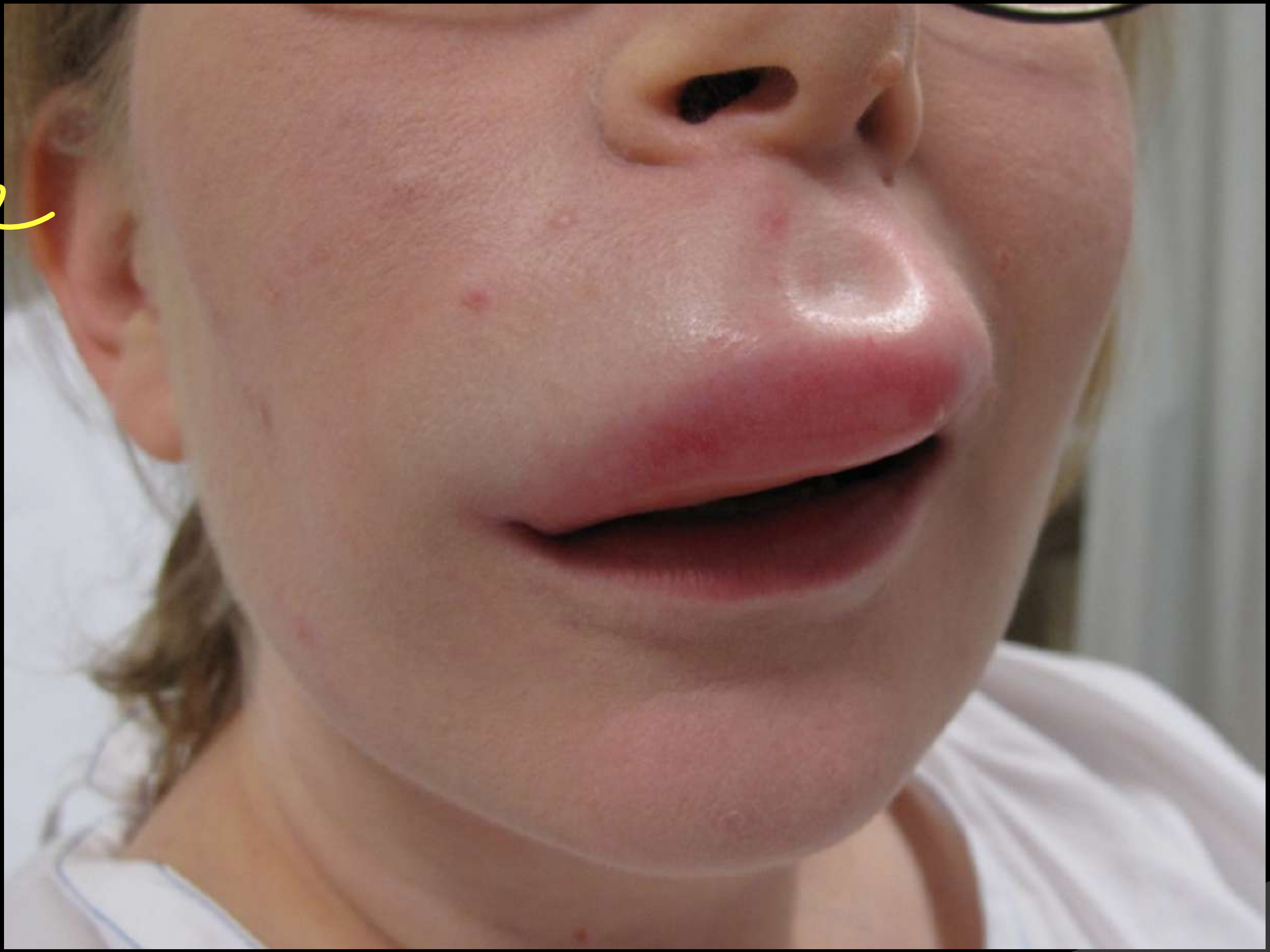
(pain and joint pain , fever , weight loss)

(bahcet disease , herpes simplex , HIV , cancer of lung , bowel , liver)

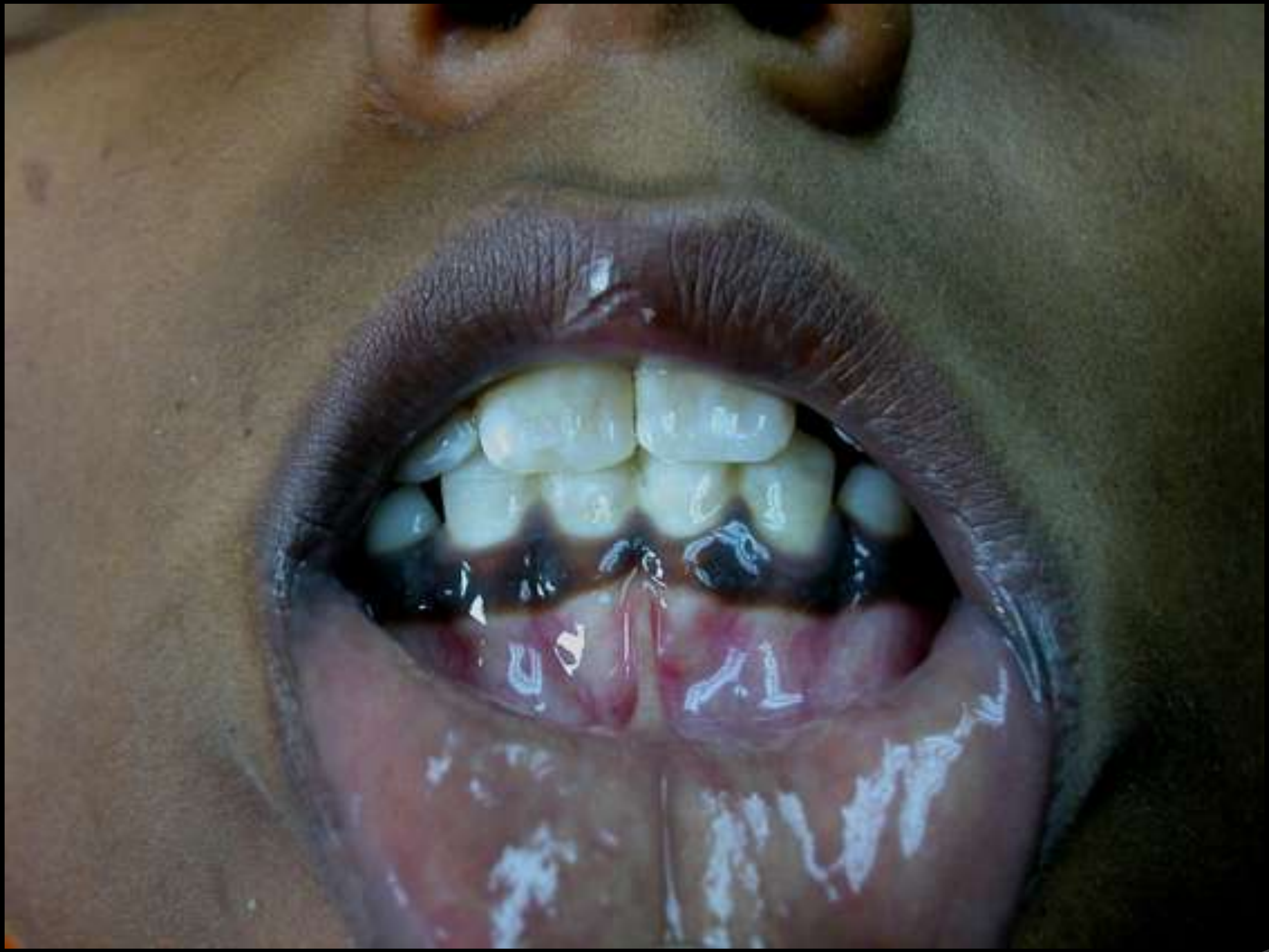


Swelling of the lip [angioedema, hereditary or IgE dependent]

Tongue



Gum hyperpigmentation [Addison's disease]



Gum hypertrophy [calcium channel blockers, Phenytoin therapy and AML M5]

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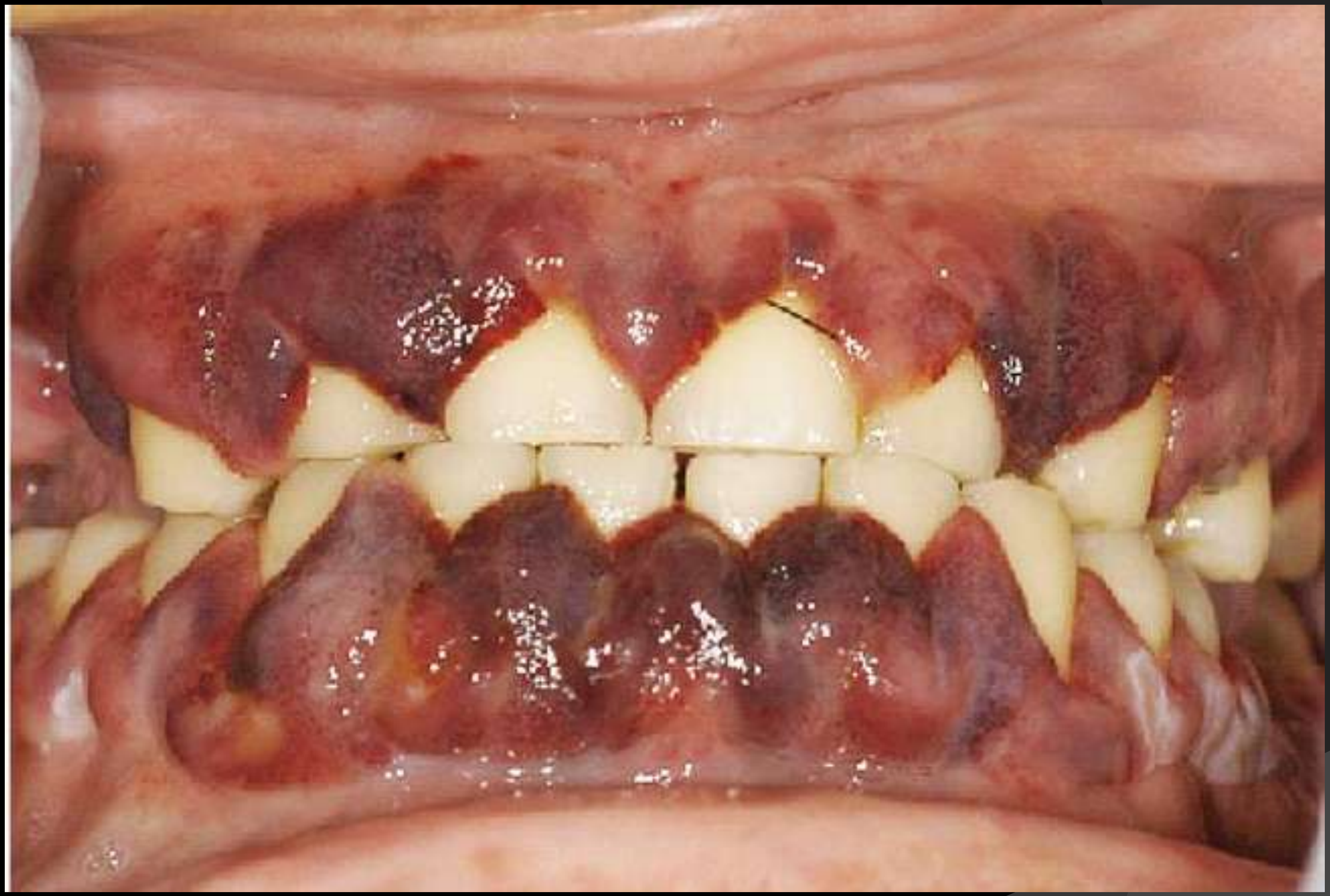
CCB (nifedipine , also swelling of the ankle)

Phenytoin (anti convulsnt)

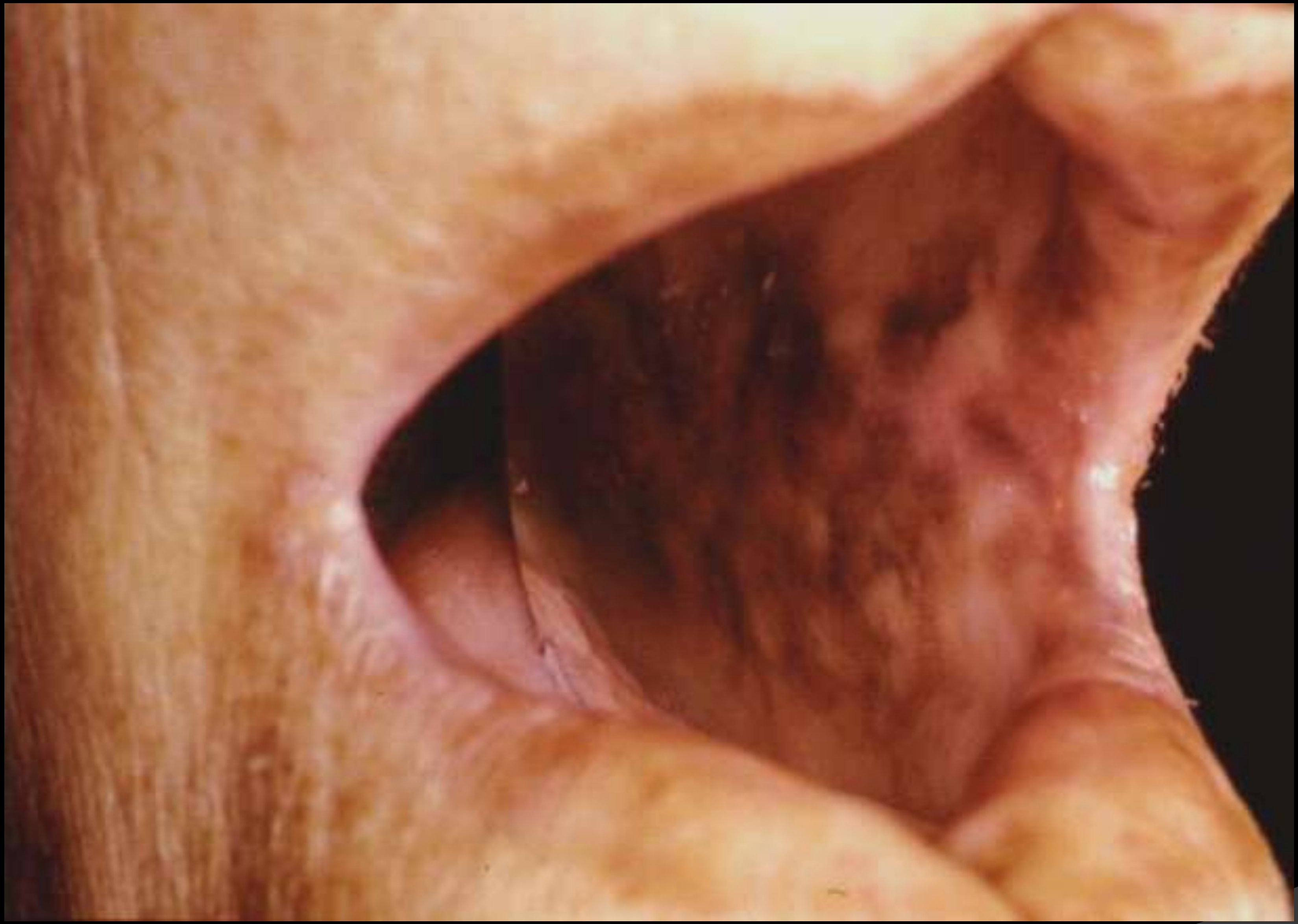
AML (acute myloplastic leukemia type M5)

Bleeding gum may be seen in vitamin C deficieny



Buccal hyperpigmentation [Addison's disease]

✓



Multiple aphthous ulcers

[idiopathic, Behcet disease, IBD, HIV infection]

Usually infection or inflammatory

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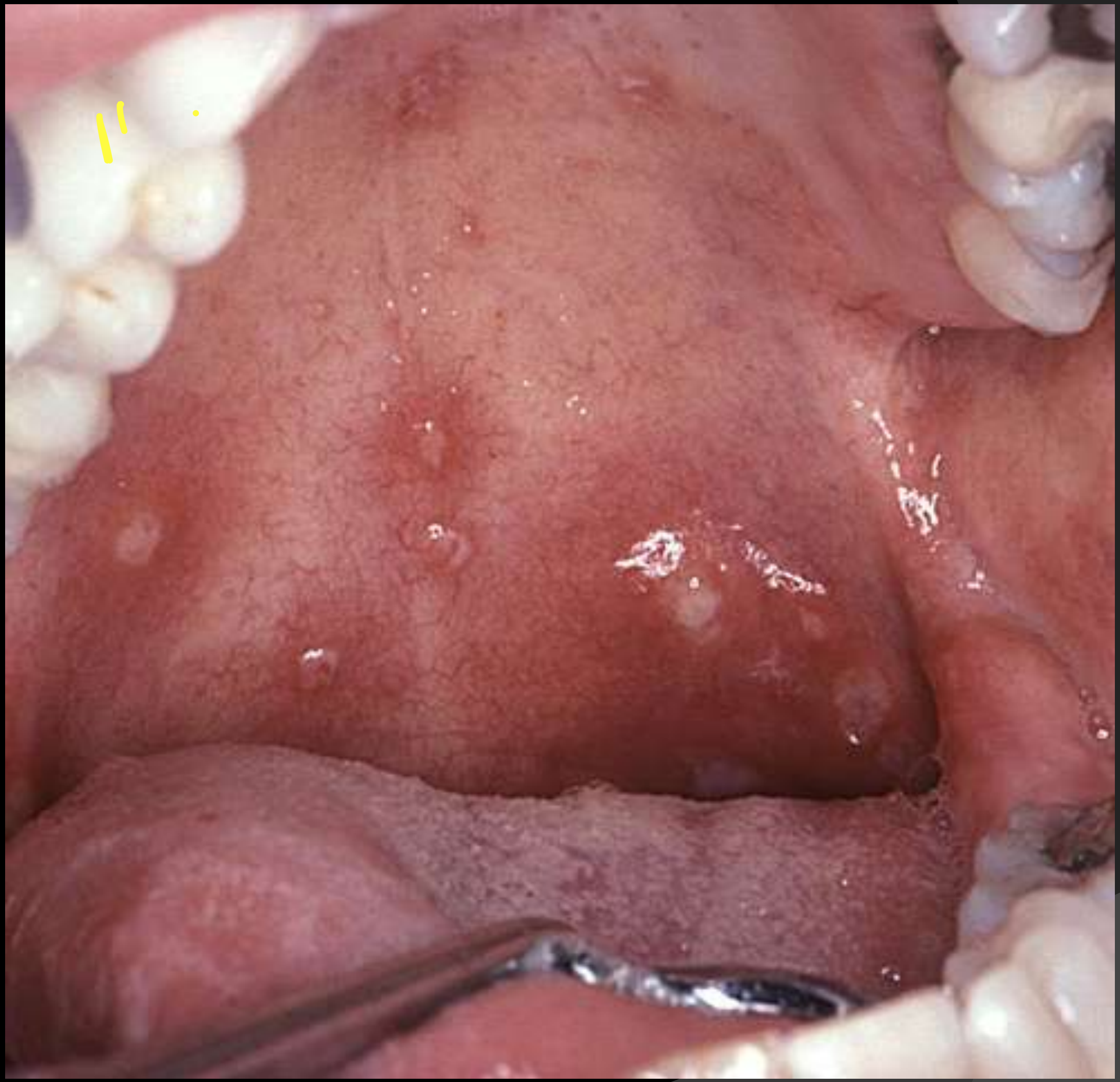


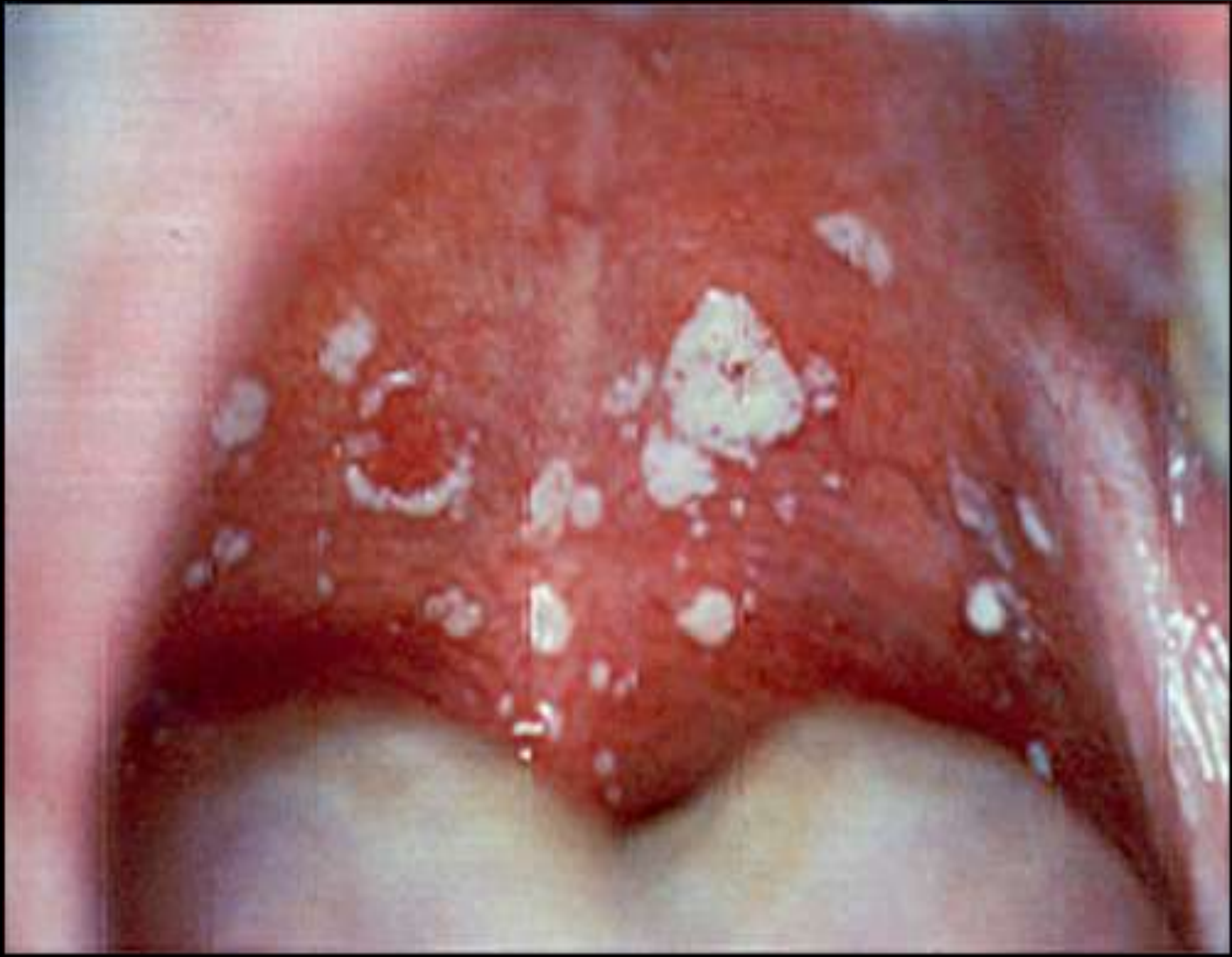
White patches of oral mucosa [Candida albicans infection]

Whitish painless patches that are easily removed and sometimes itchy ,

قطرات النيستاتين

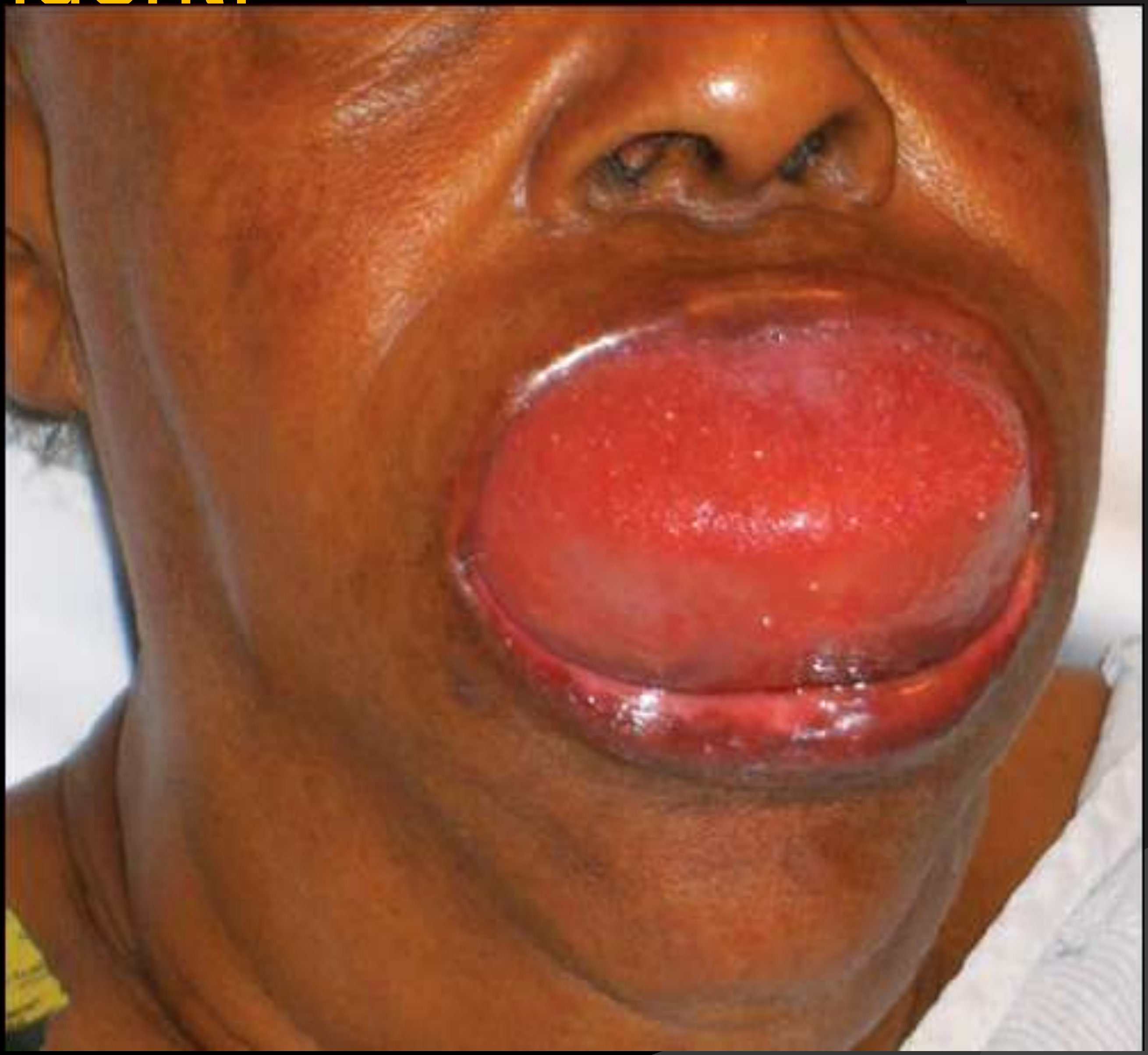
drug of choice is nystatin drops in the mouth , in the the elderly we give cream , the most common cause is inhalers usage and oral steroids therapy in

patients with COPD and asthma due to immune suppresion



Leukoplakia (can not be removed , heavy smoking , malignant transformation)

Swelling of the tongue [angioedema, hereditary or IgE dependent]



✓

Allergy , may be lethal because it may lead to asphyxia

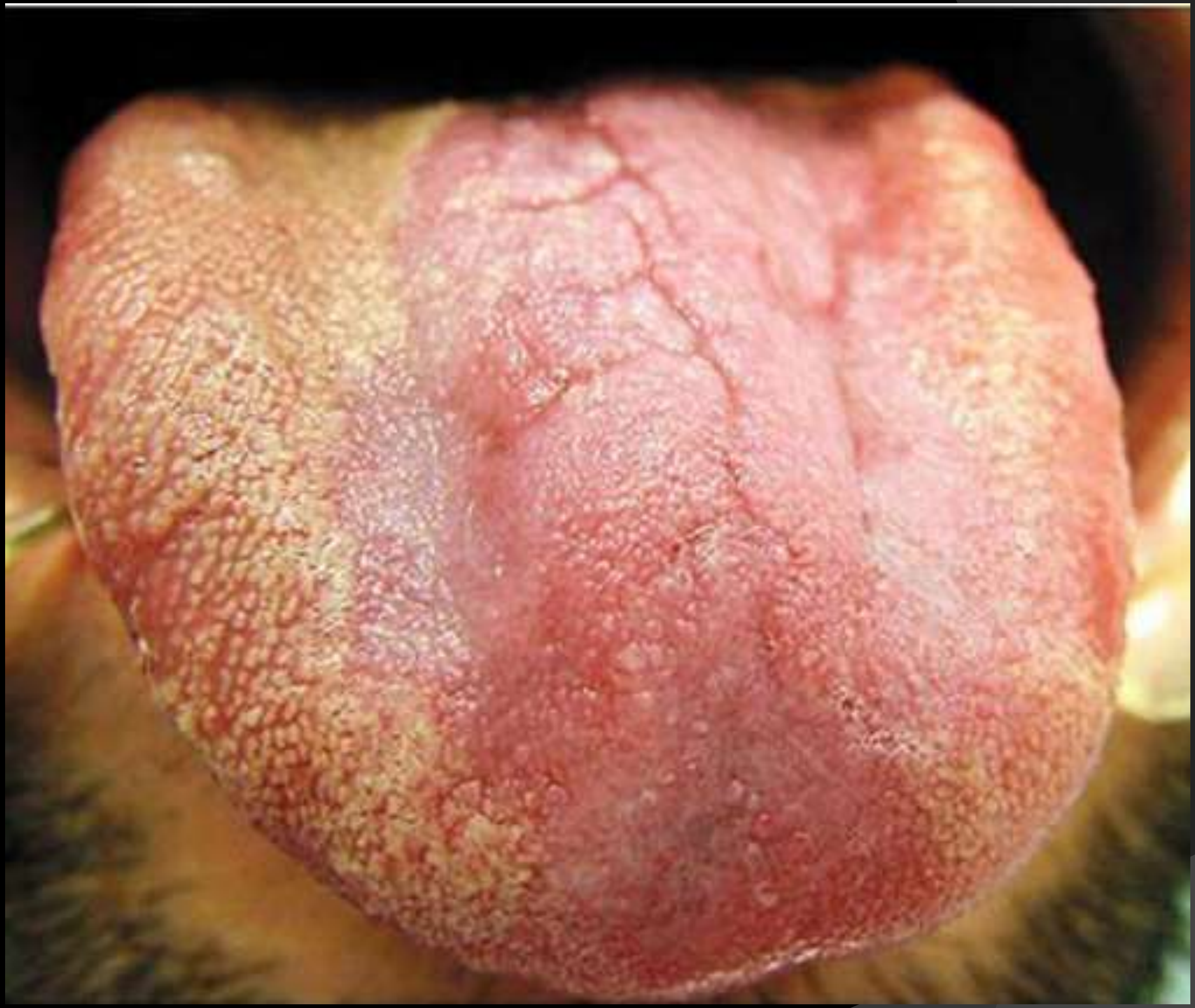
Atrophic glossitis [B_{12} and iron deficiency]

atrophic glossitis

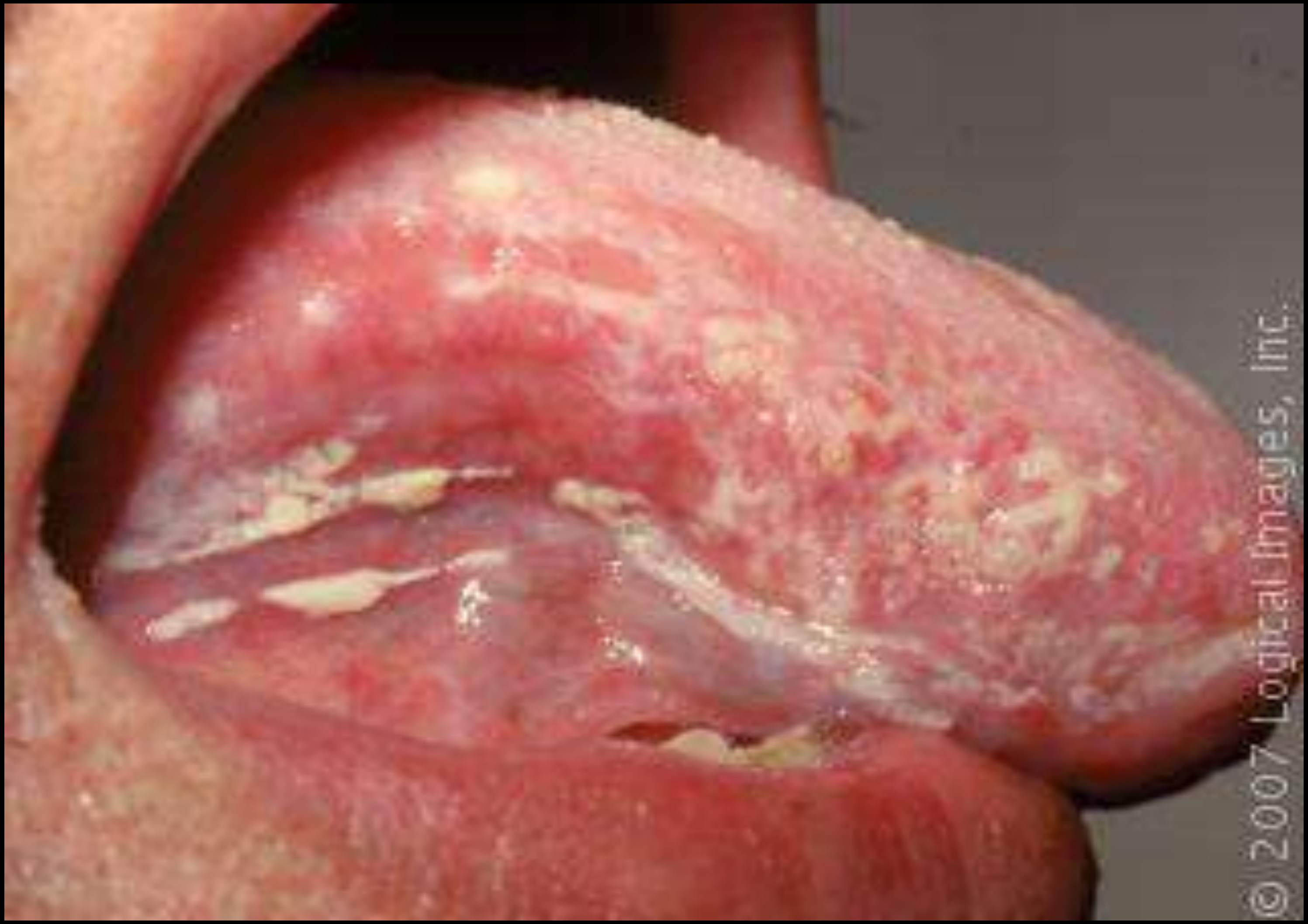
Atrophic glositis :

Cracking of the tongue and fissureing and desquamation causing the yellow color

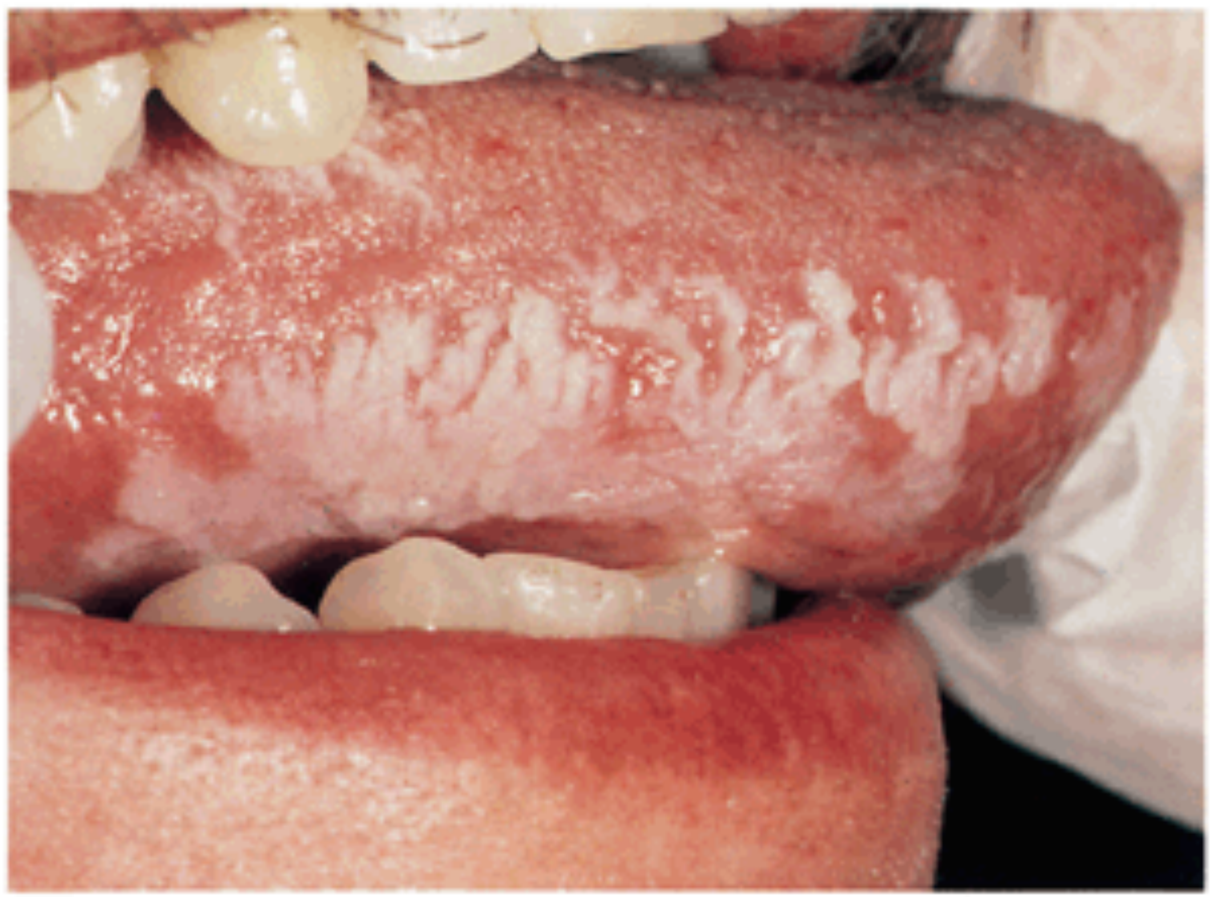
Deficiency of Iron and vitamin B complex



White patches on the tongue [Candida albicans infection]



White plaques on the tongue [Leukoplakia /Epstein Barr virus infection]



High arched palate [Marfan syndrome]

Marfan syndrome

mitral

Other signs :

Arachnodactyly (long and thin fingers)

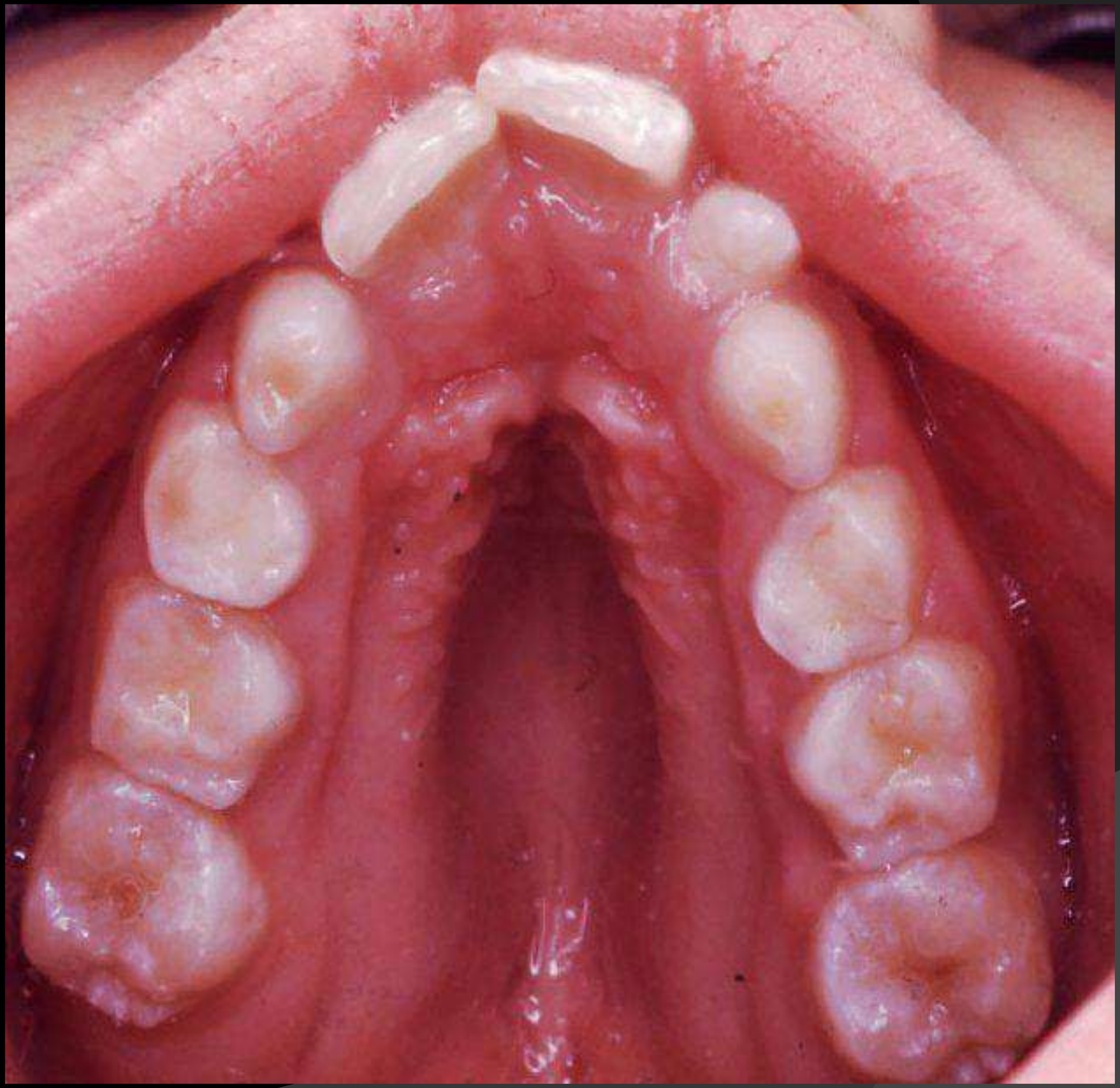
Long arm span (longer than his lenth)

High length

Lens dislocation

Aortic aneurism and mitral regurgitation

We must do ECHO to diagnose of there is aneurism or a mitral regurgitation (Q/ mention a mandatory test for Patient with Marian syndrome , A/ ECHO



Left parotid enlargement [Sjogren's syndrome]

Causes :

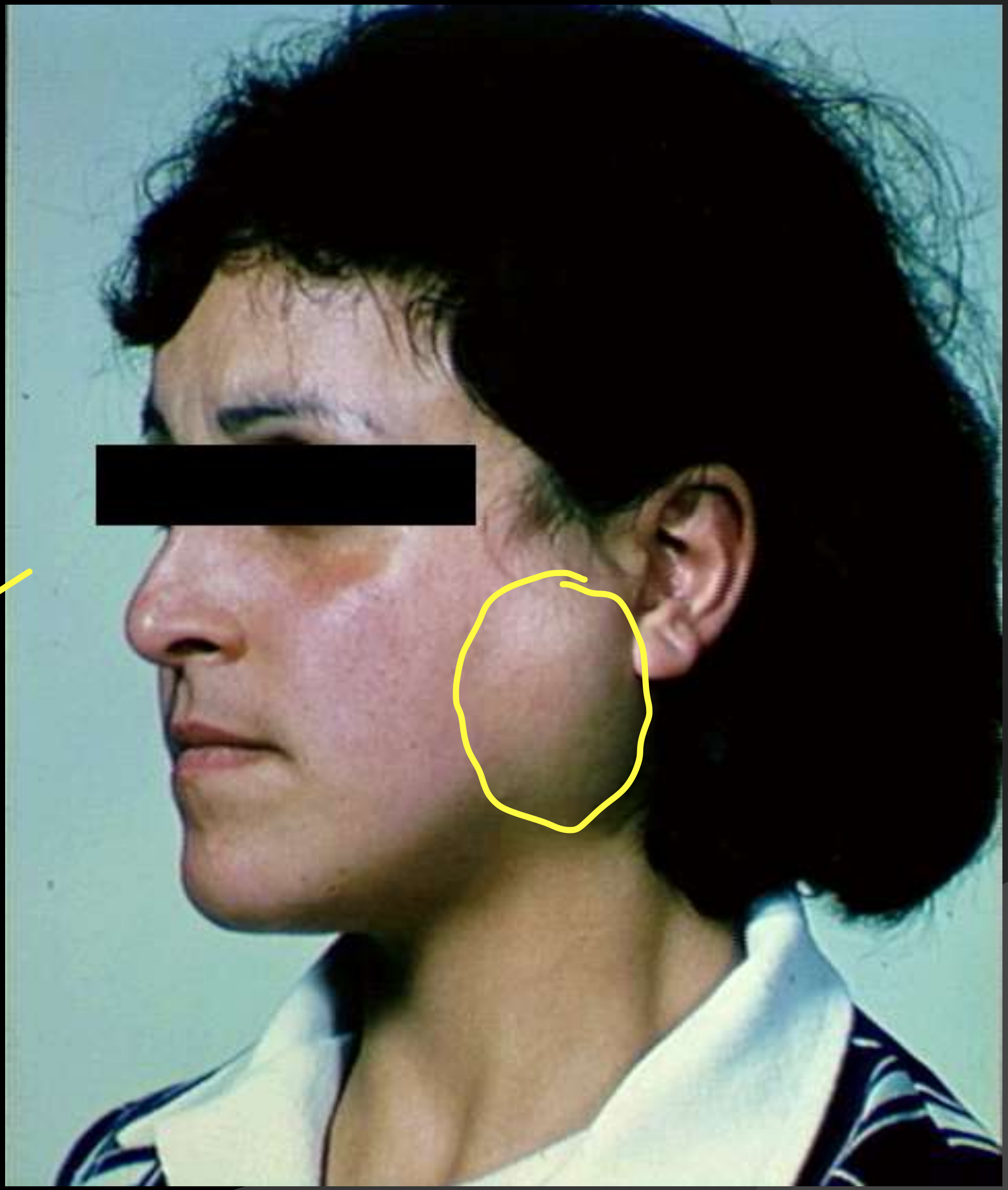
Mumps (bacterial)

Sjogren syndrome

Lymphadenopathy

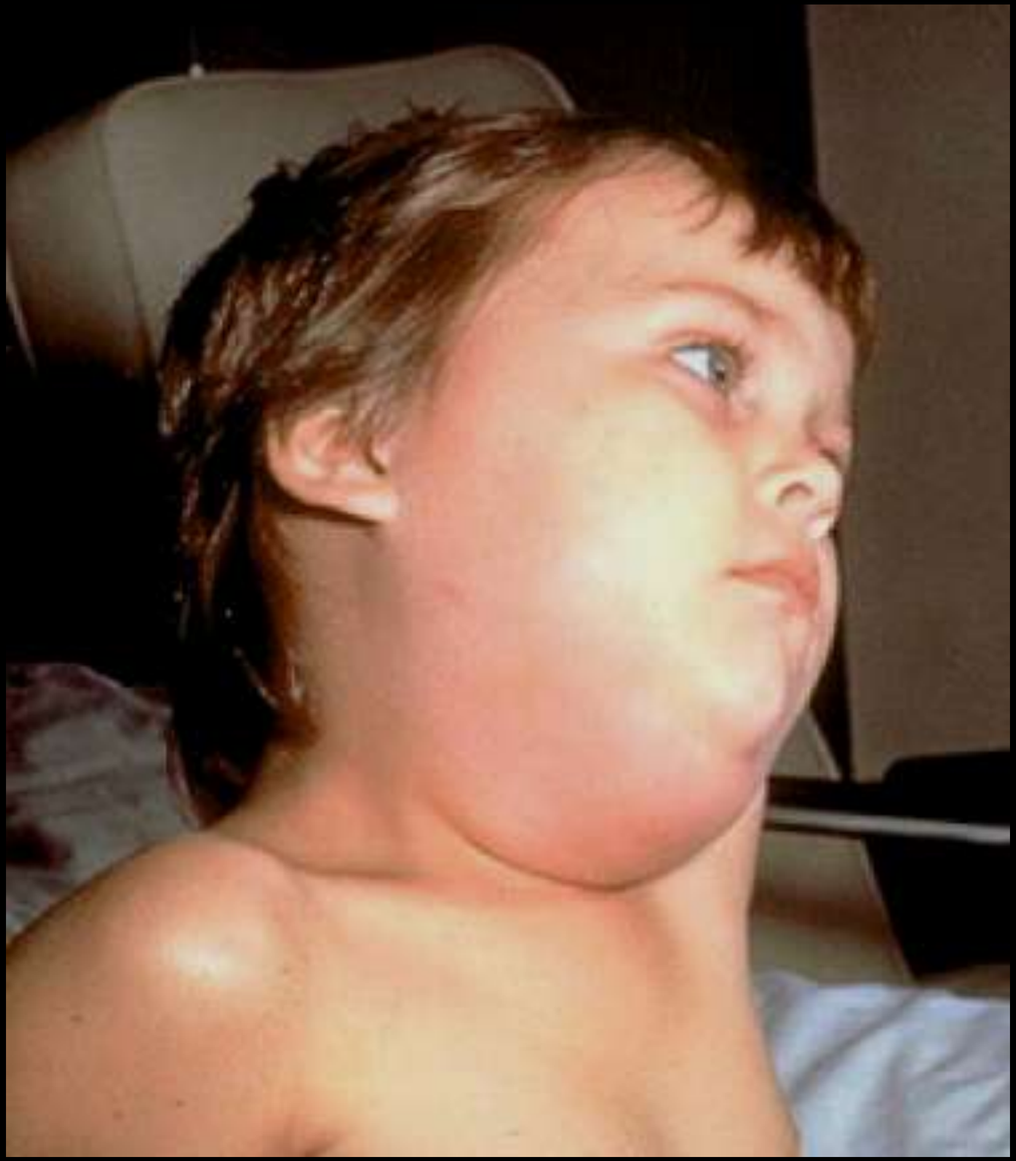
Tumor (mixed tumor called pleomorphic adenoma)

.....



[redacted]

Right parotid enlargement [mumps]



Cervical lymph node enlargement [lymphoma]

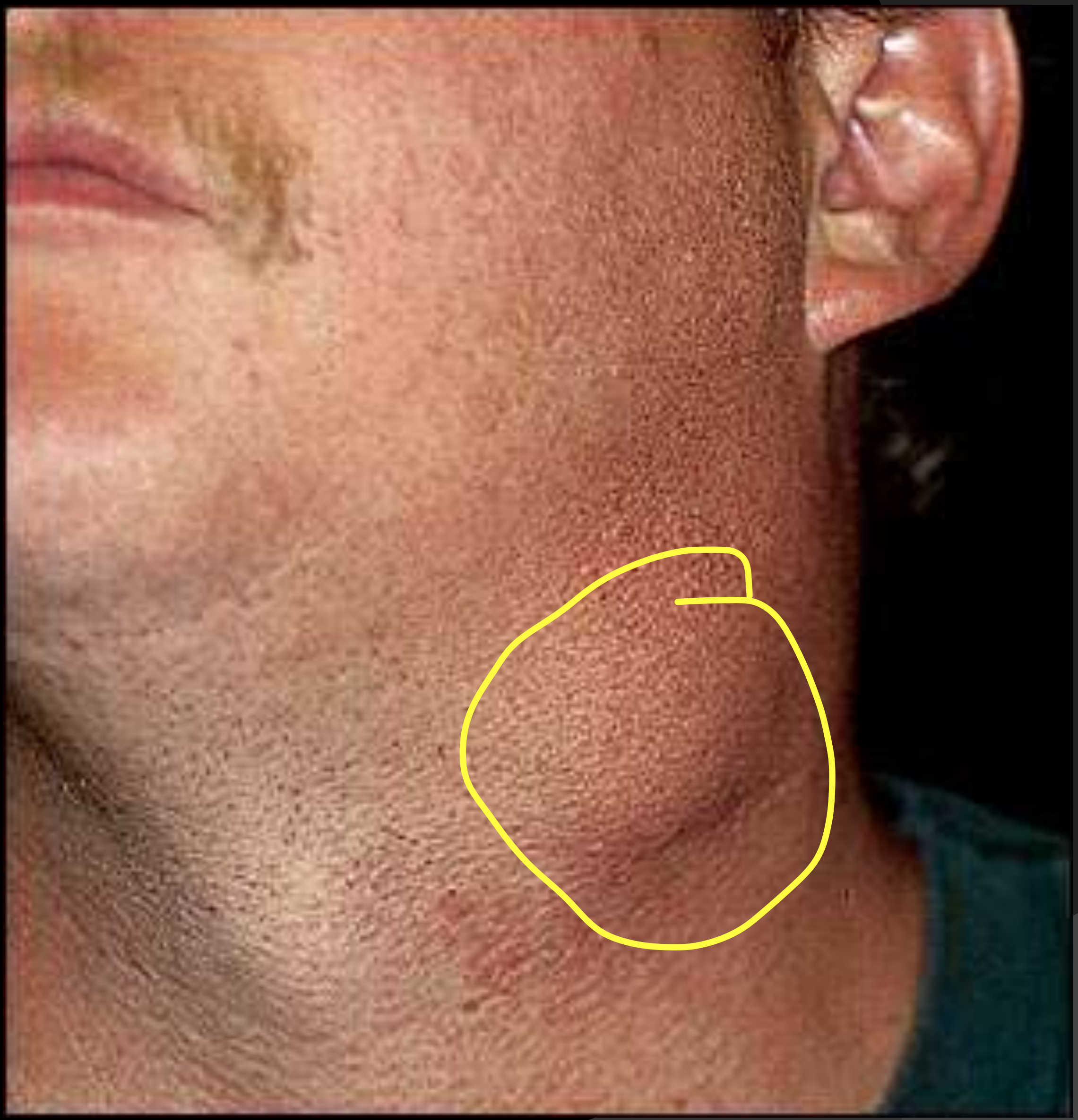
Swelling of mass in the neck

Swelled Lymph nodes

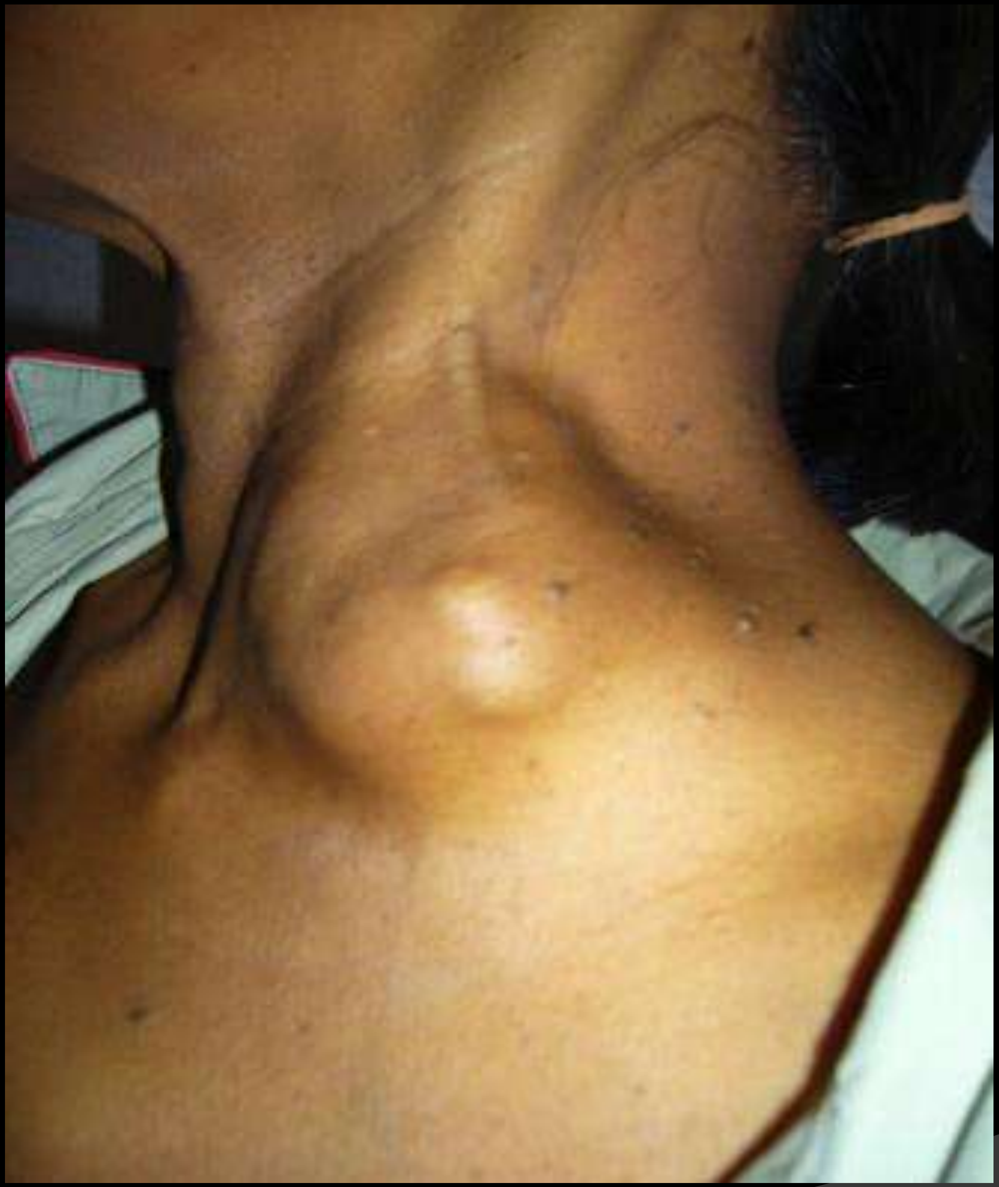
Thyroid goiter

cystic hygroma

Tumor



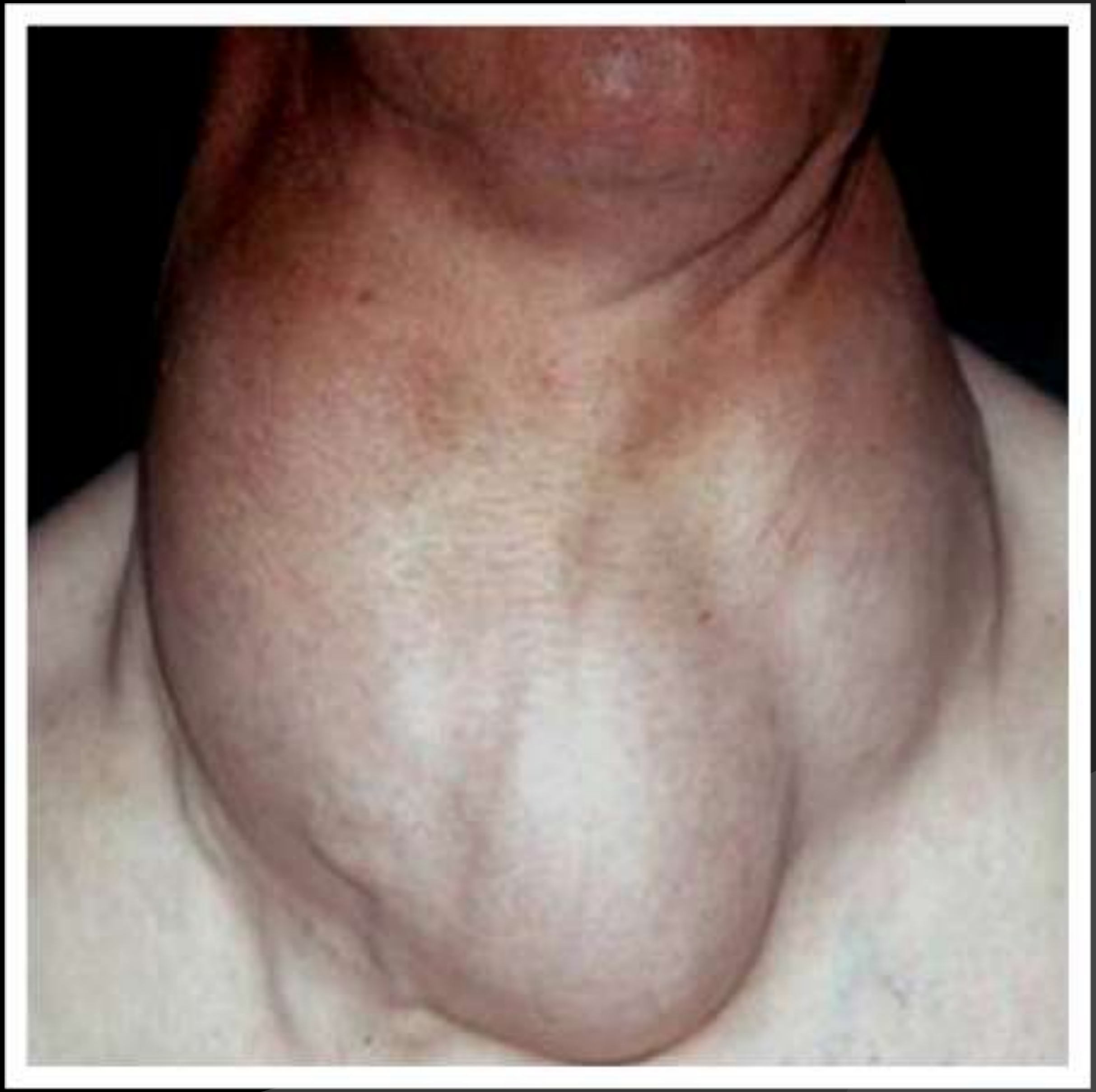
Supraclavicular lymph node enlargement (Virchow's node) [gastric cancer]



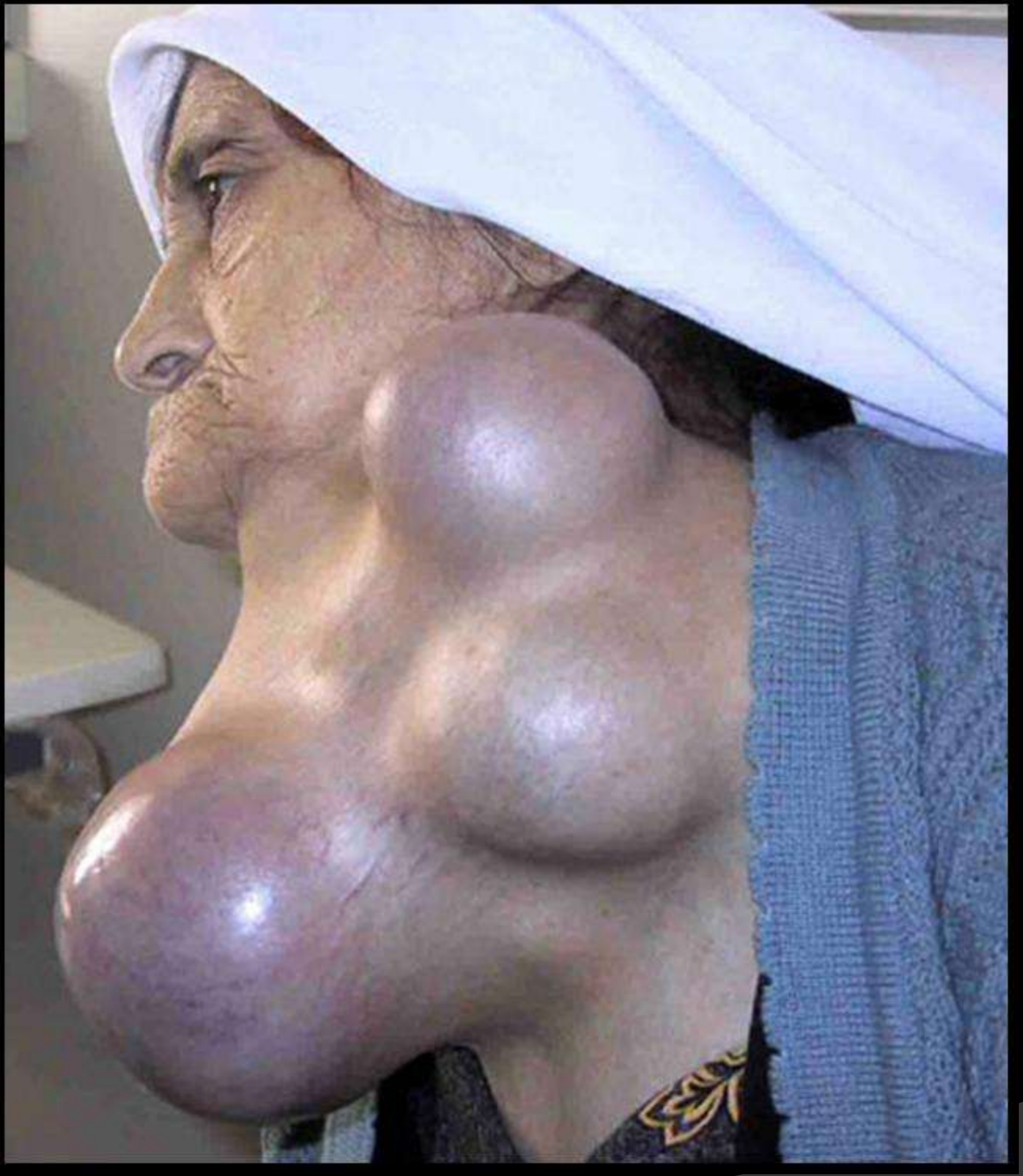
Multinodular goiter [simple multinodular goiter]

The same diffrential diagnosis as neck swelling

We must do thyroid test (T3,4 TSH)



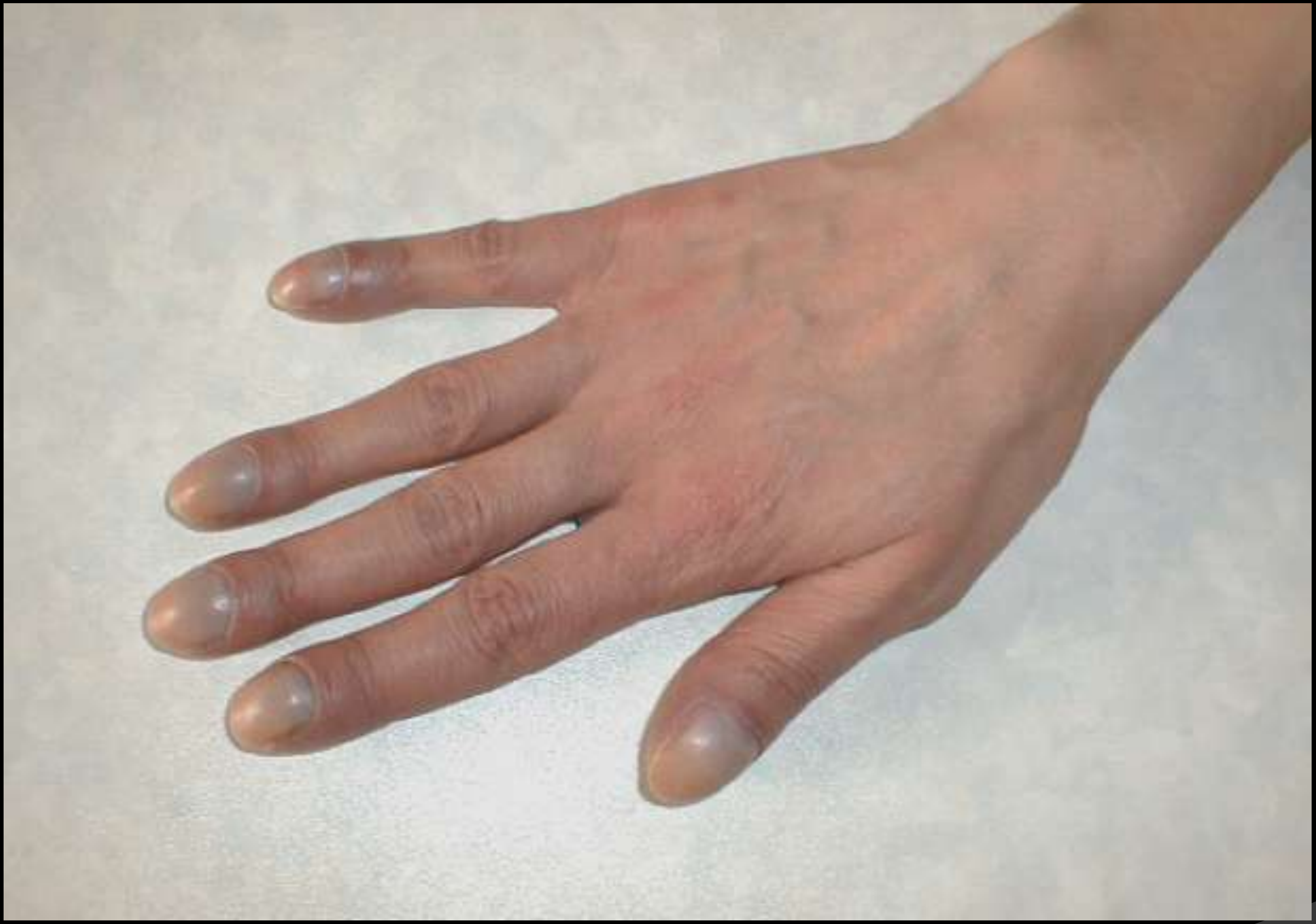
Multinodular goiter
[simple multinodular goiter]



Clubbing and cyanosis

CCHD

[cyanotic congenital heart diseases]



Clubbing
[bronchogenic cancer]

Familial (5%)

Occupational

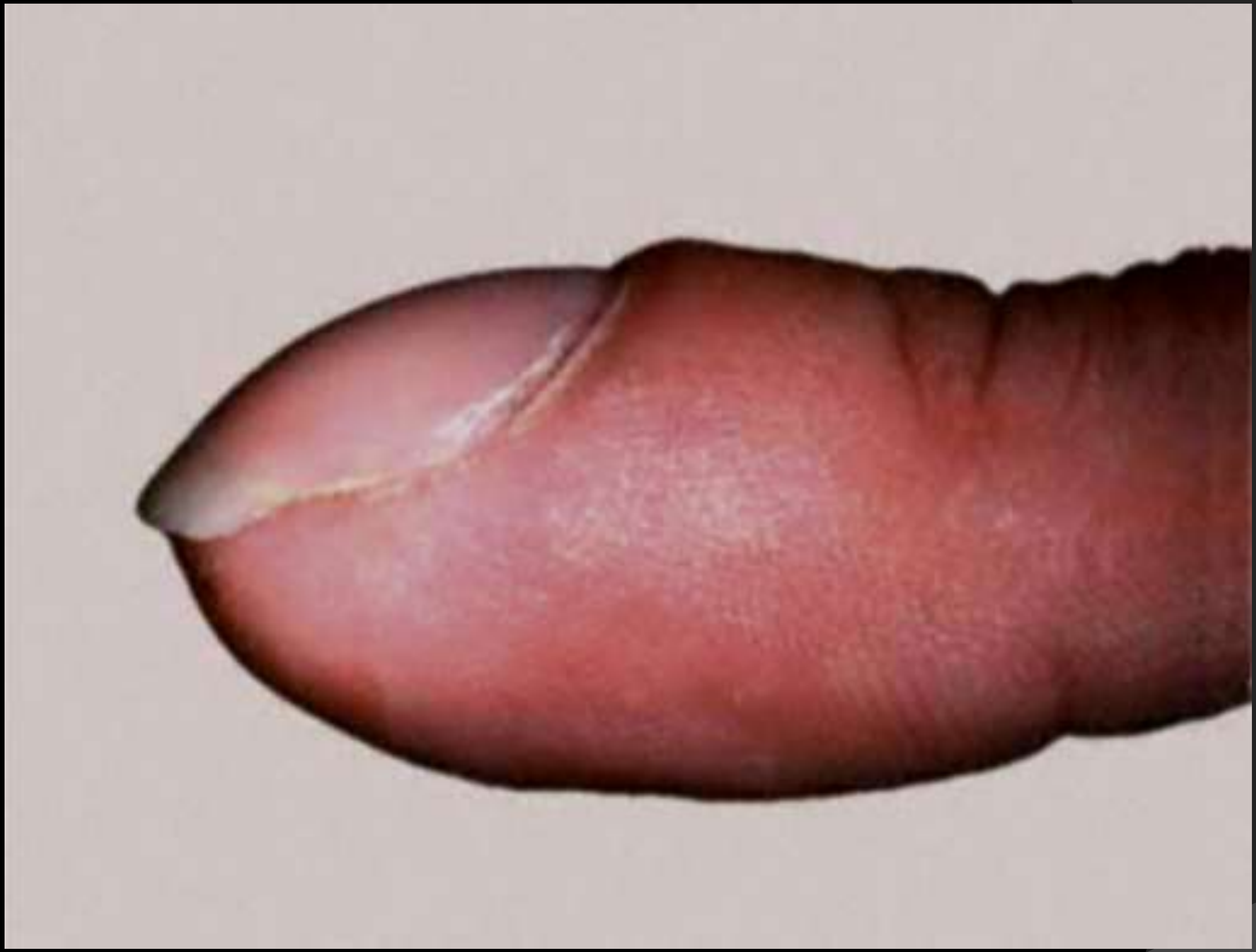
Heart : Cyanotic congenital heart disease

Respiratory : Broncogenic carcinoma , TB and empyema and abscess , cystic fibrosis , , cancer of lung

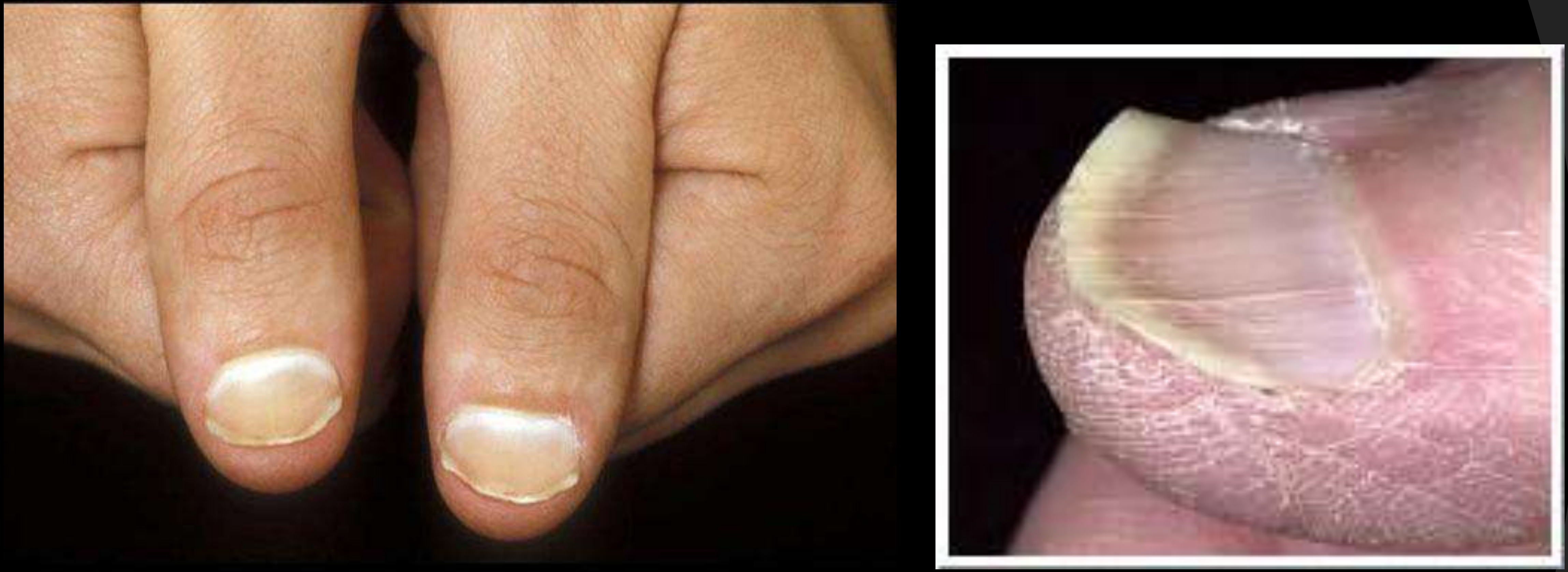
GIT : Inflammation bowel disease , cirrhosis , hepatocellular carcinoma and cirrhosis

Endocrine : Acromegaly , thyroid acropachy

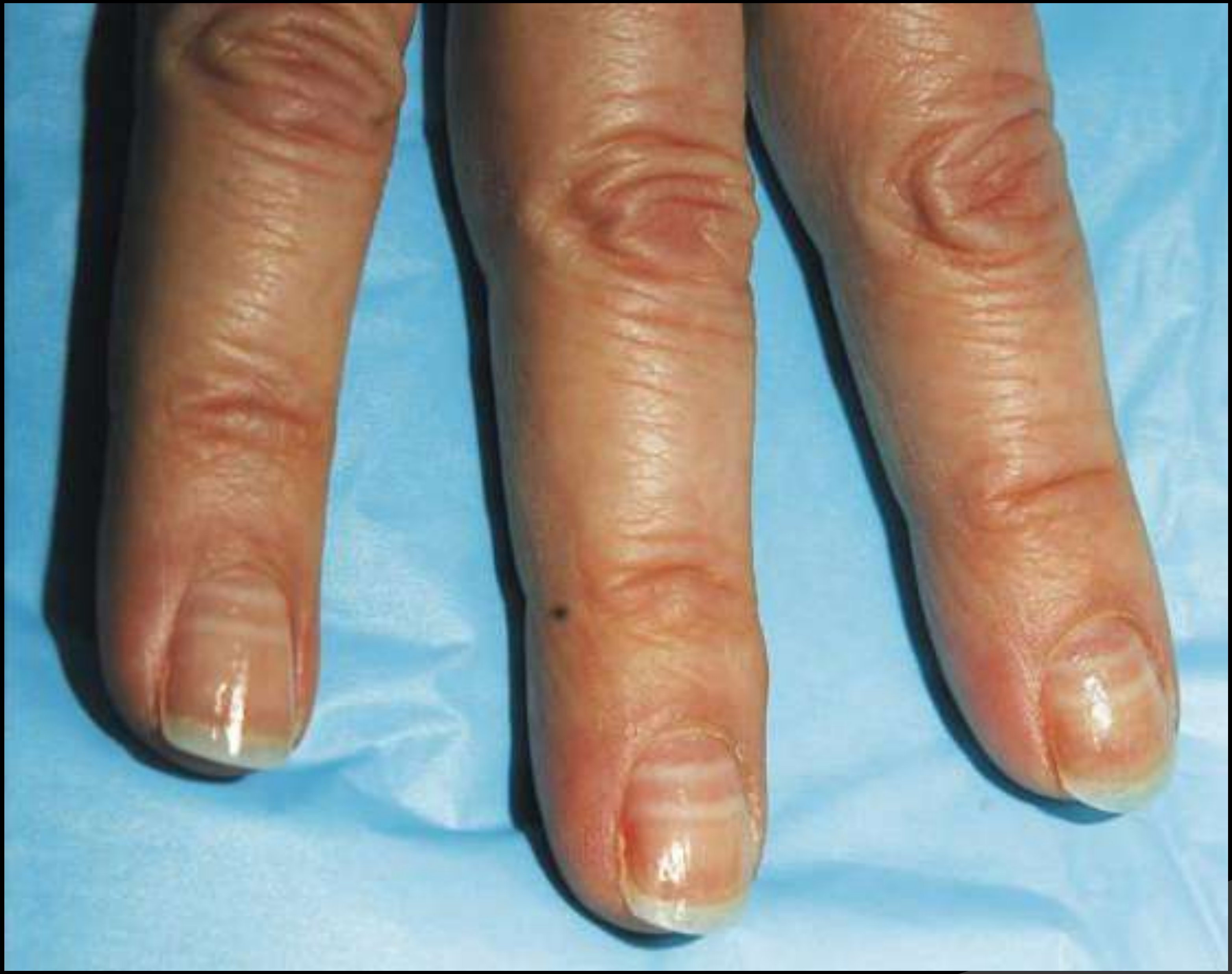
Note : you may be asked about the causes of any system



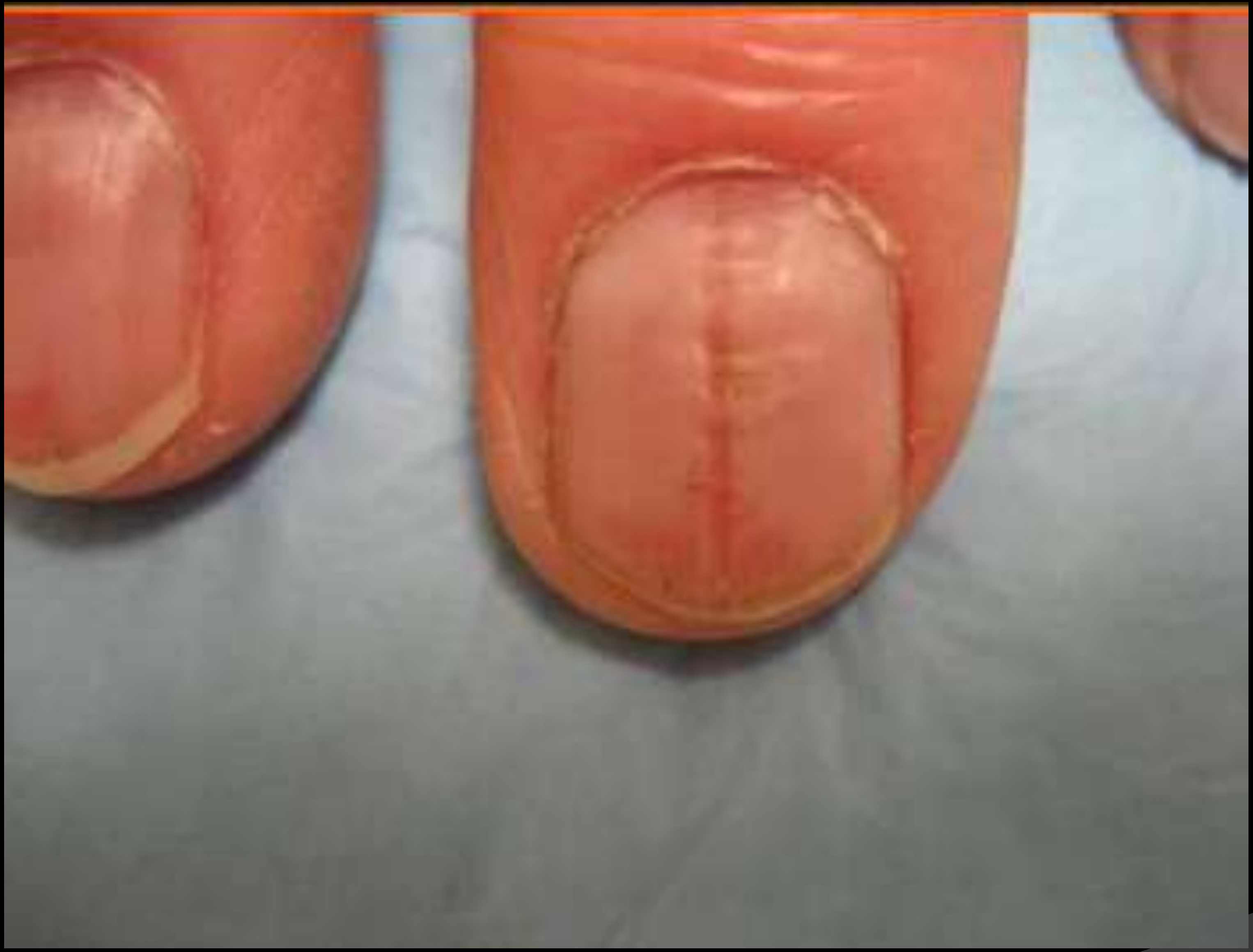
Koilonychia (spooning of nail) [iron deficiency anemia]



Beau's lines [chemotherapy, transient medical illness]



Central nail canal
[peripheral vascular disease]



Nail pitting [psoriasis]

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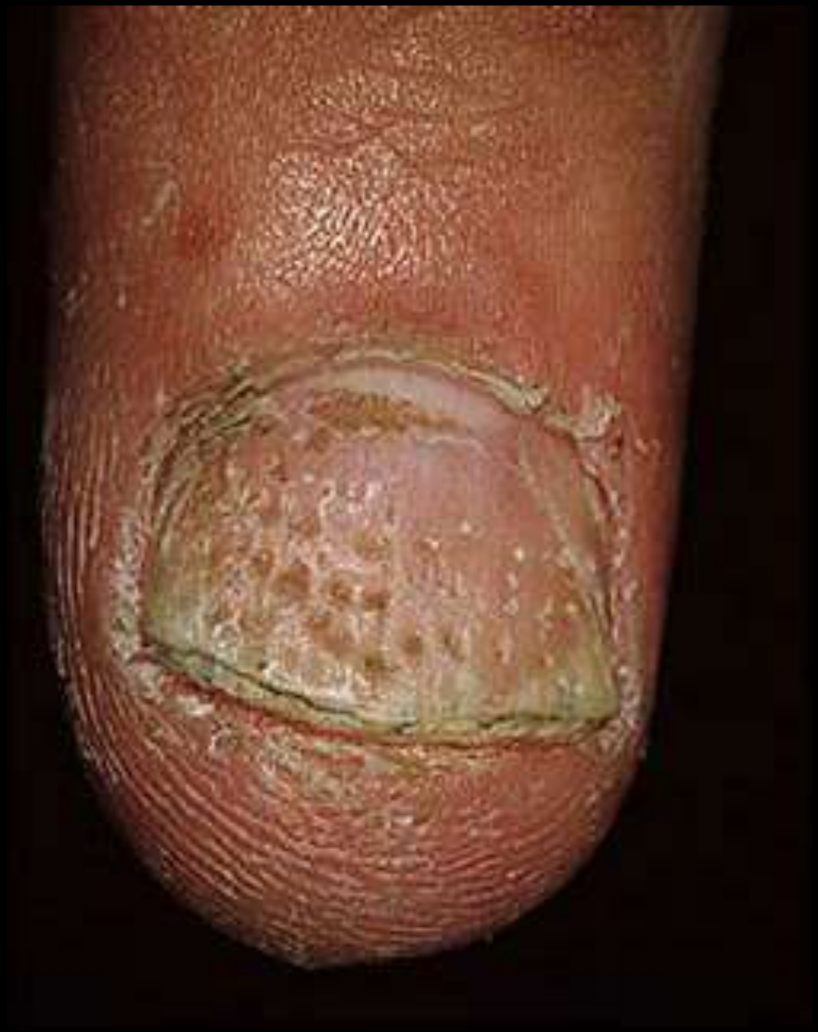
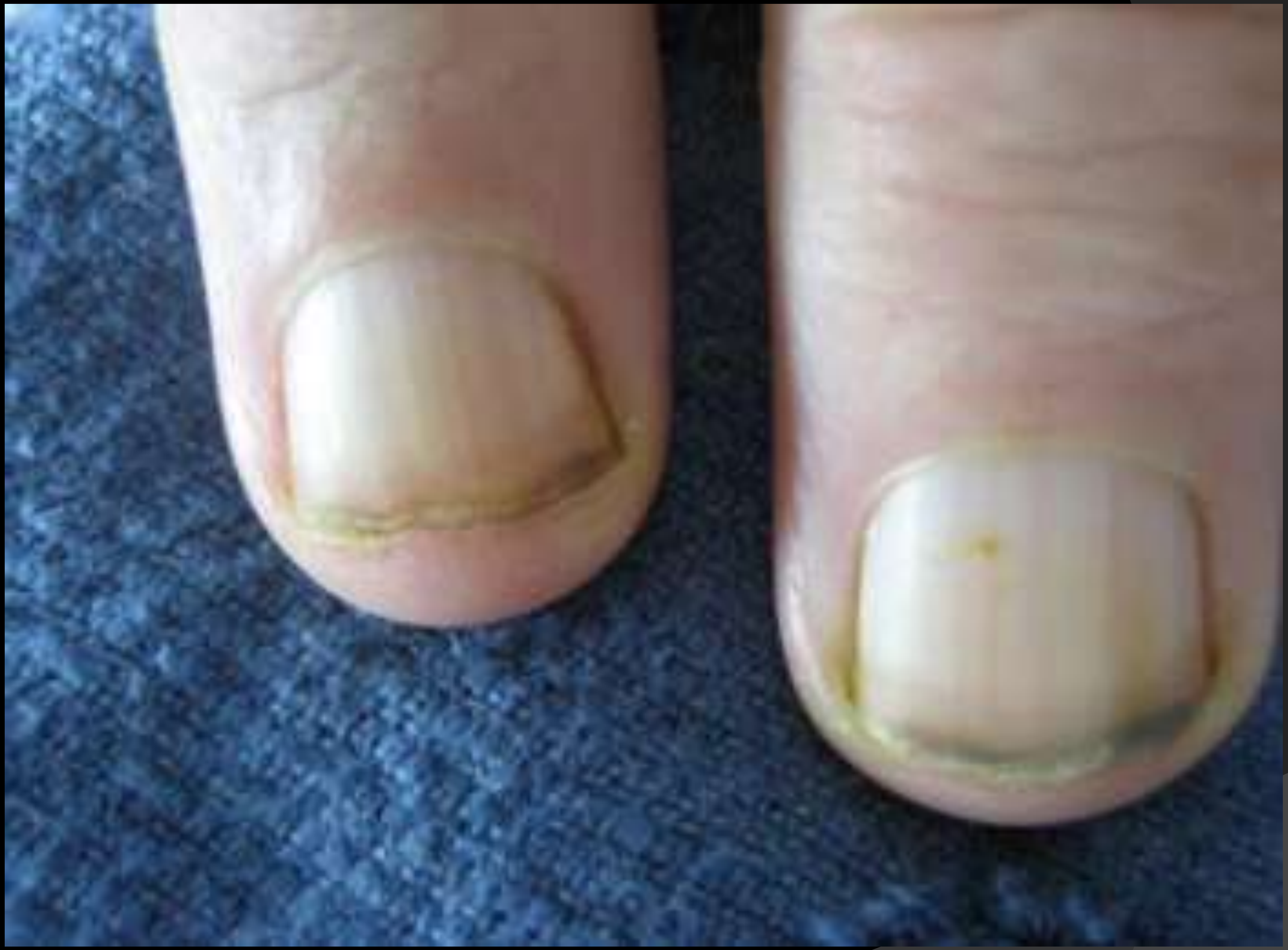


Psoriasis(early stage)
later onycholysis

Leukonychia (white nail)
[liver cirrhosis, CRF]

Chronic renal failure

Hypoalbuminemia



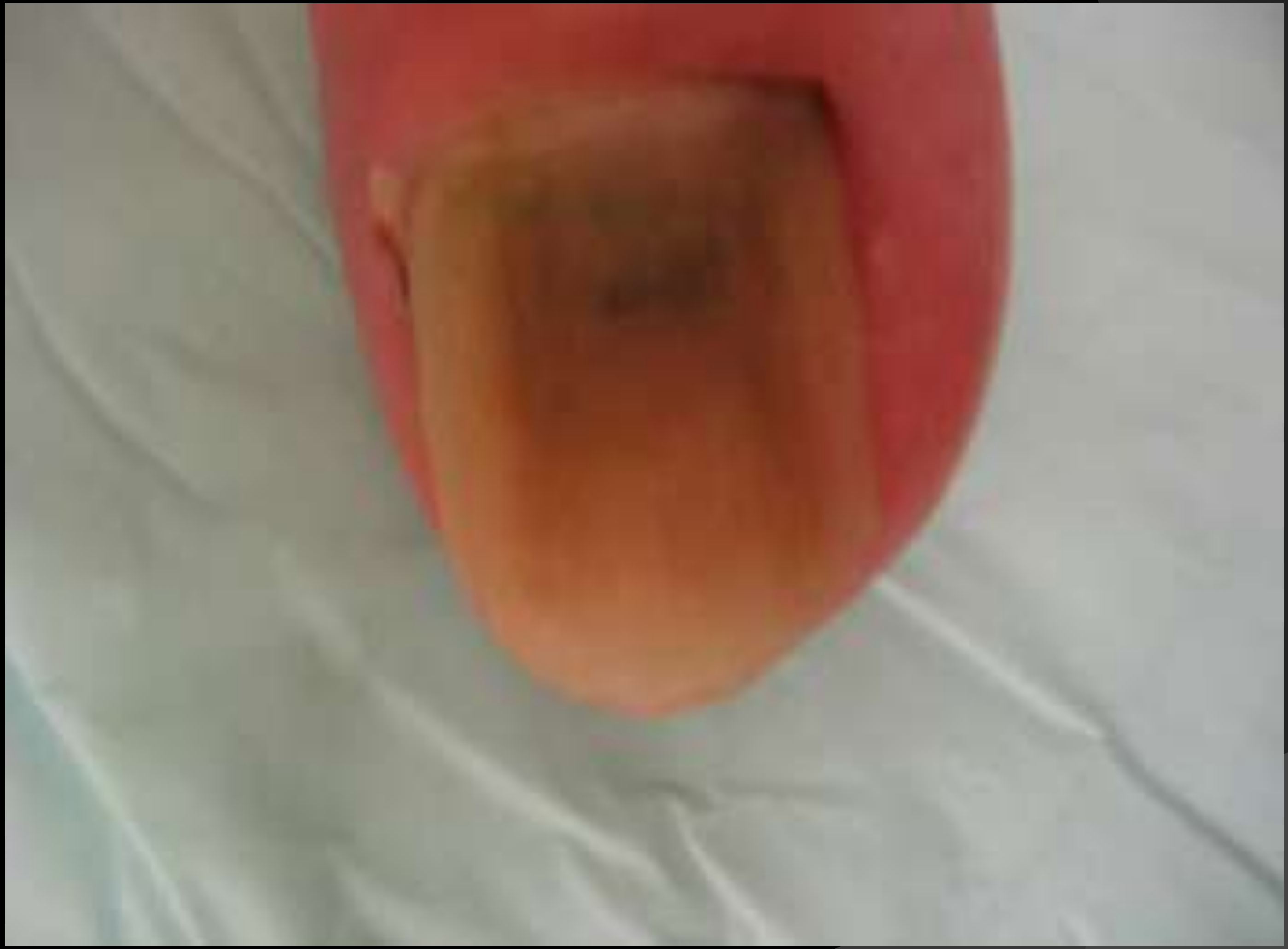
Yellow nail
[yellow nail syndrome]
(pleural effusion and bronchiectasis)

Infection (bacterial paronychia : evacuation of

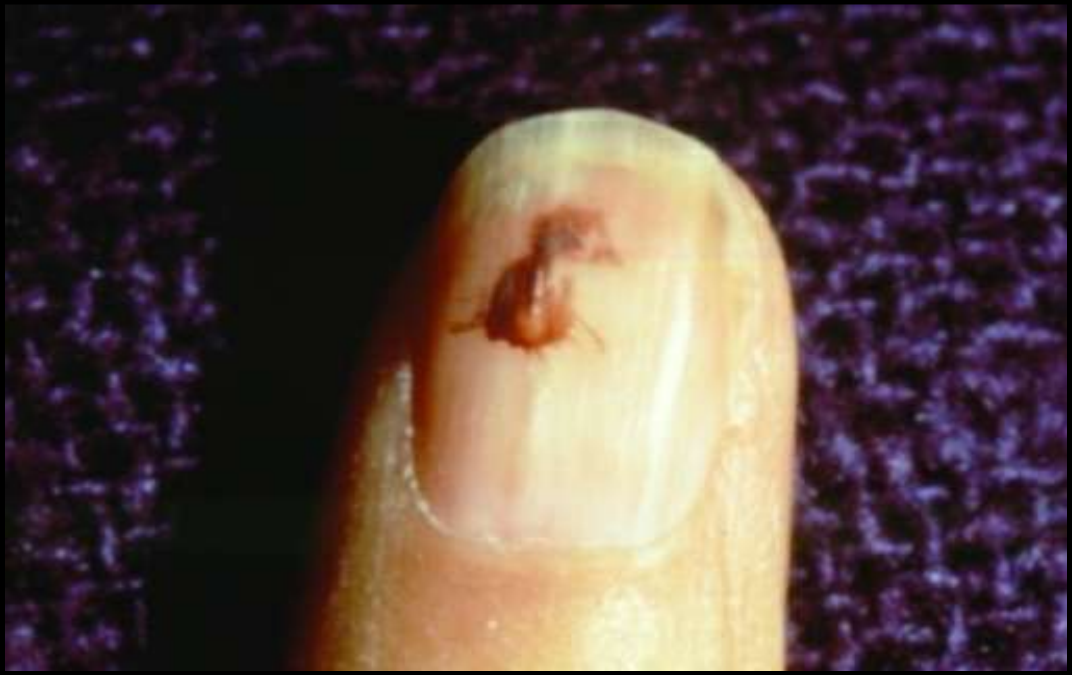
The pus and antibiotics are enough , acute Vs fungal paronychia which is chronic)

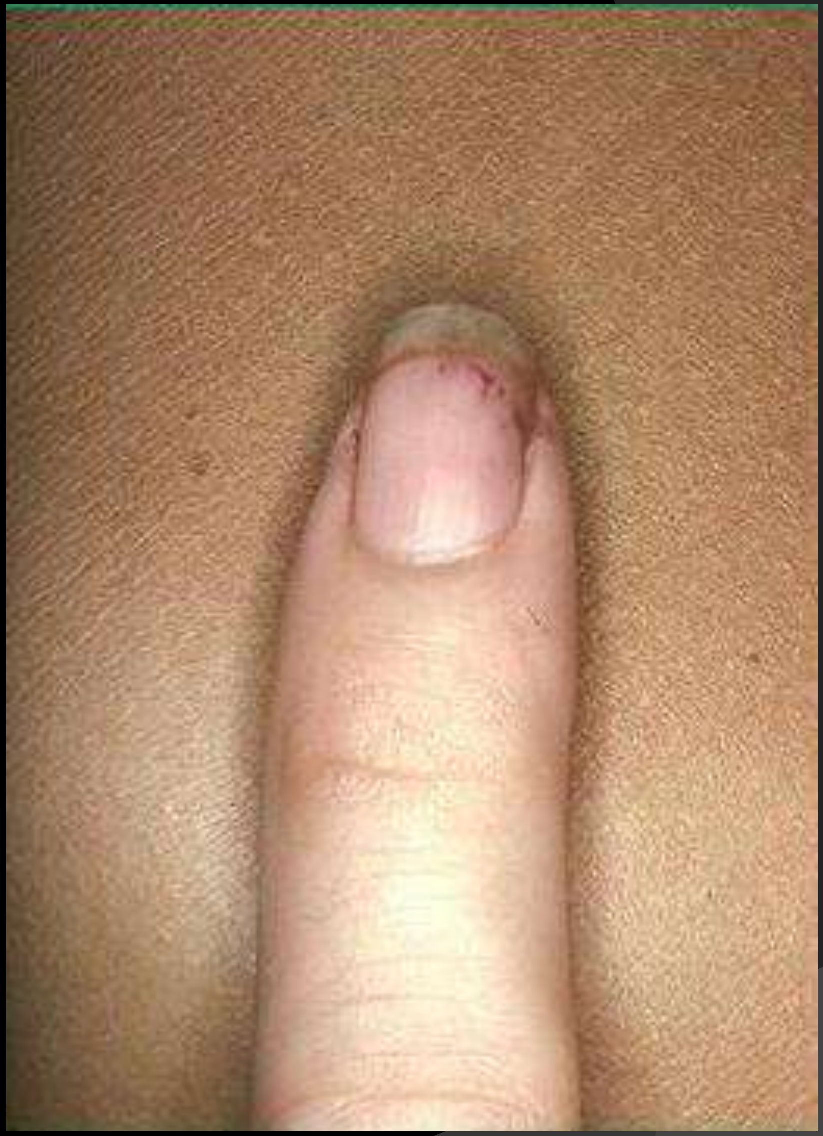
Smokers

Yellow nail syndrome



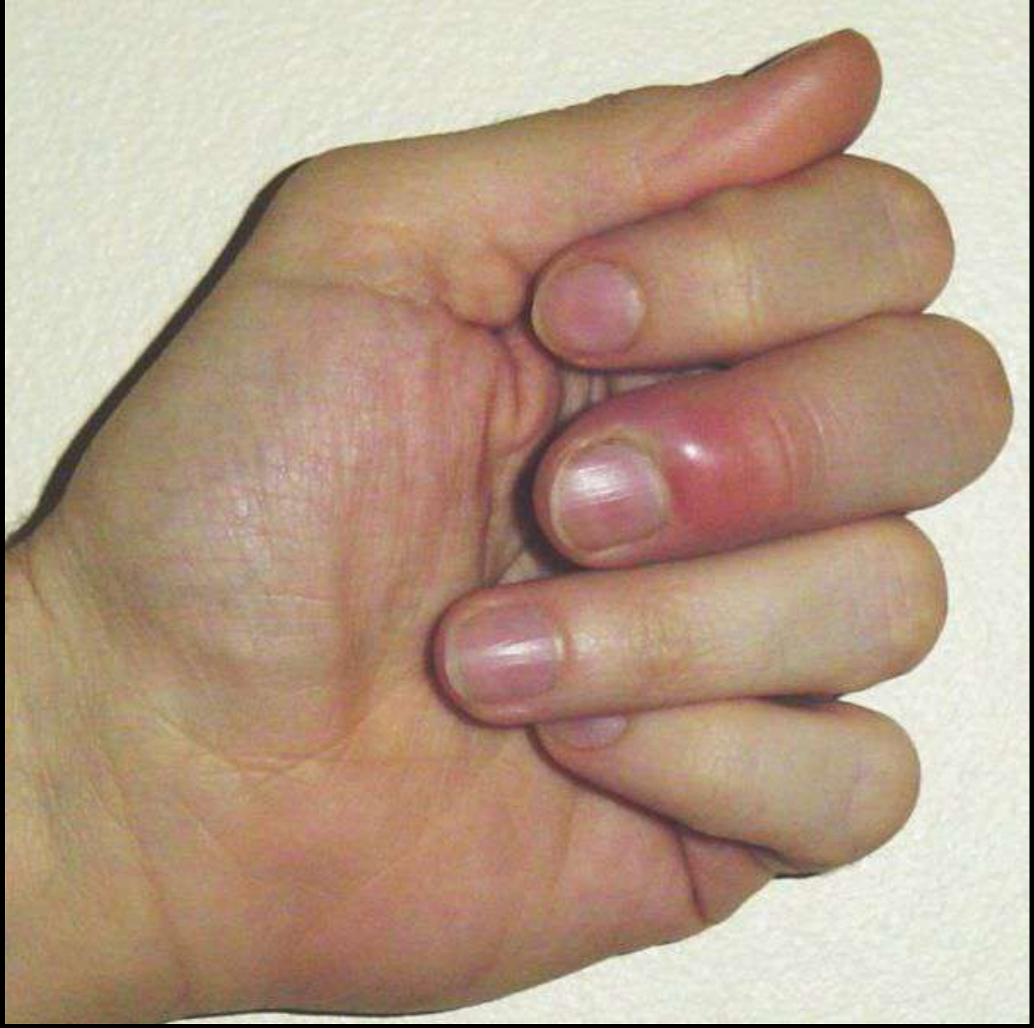
Splinter hemorrhage
[trauma, vasculitis, bacterial endocarditis]

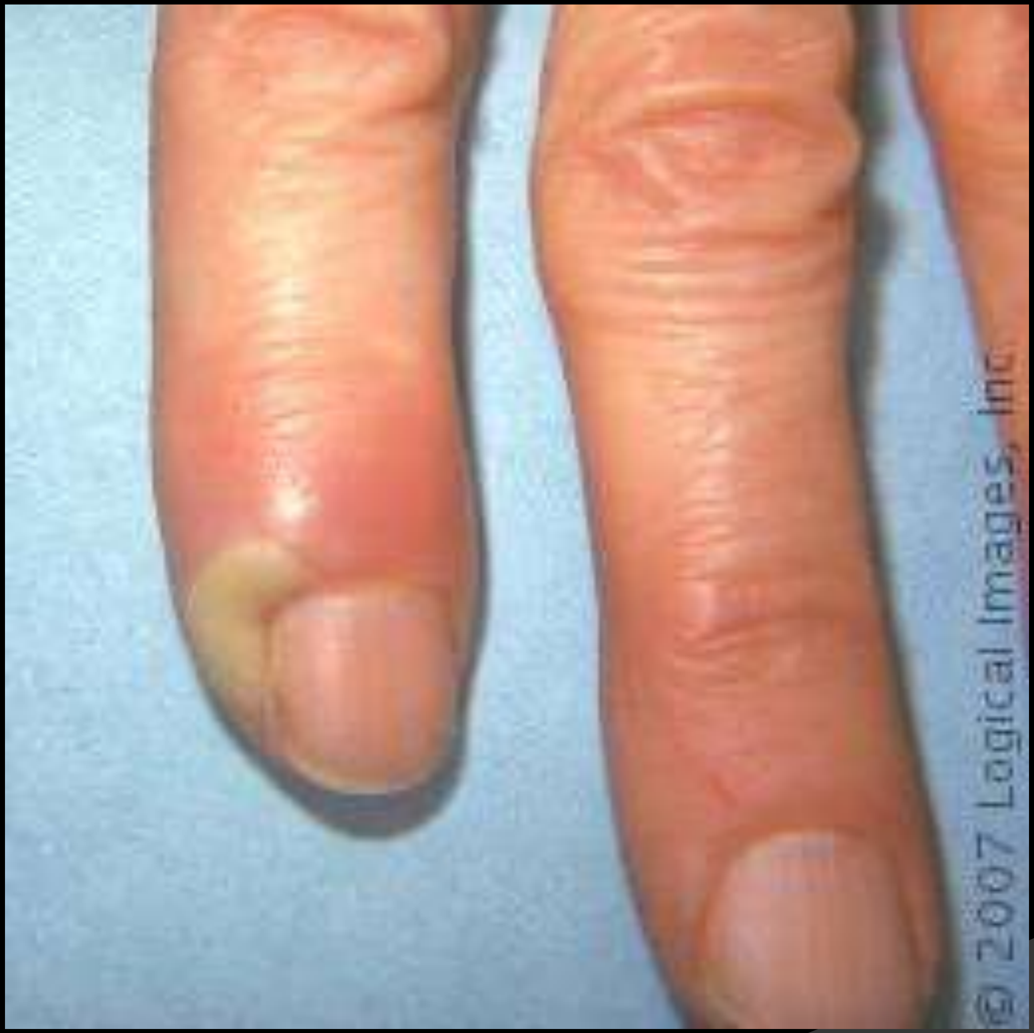




Most common cause is trauma

Paronychia
[bacterial or fungal infection]





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Fingers cyanosis
[Raynaud’s phenomena]

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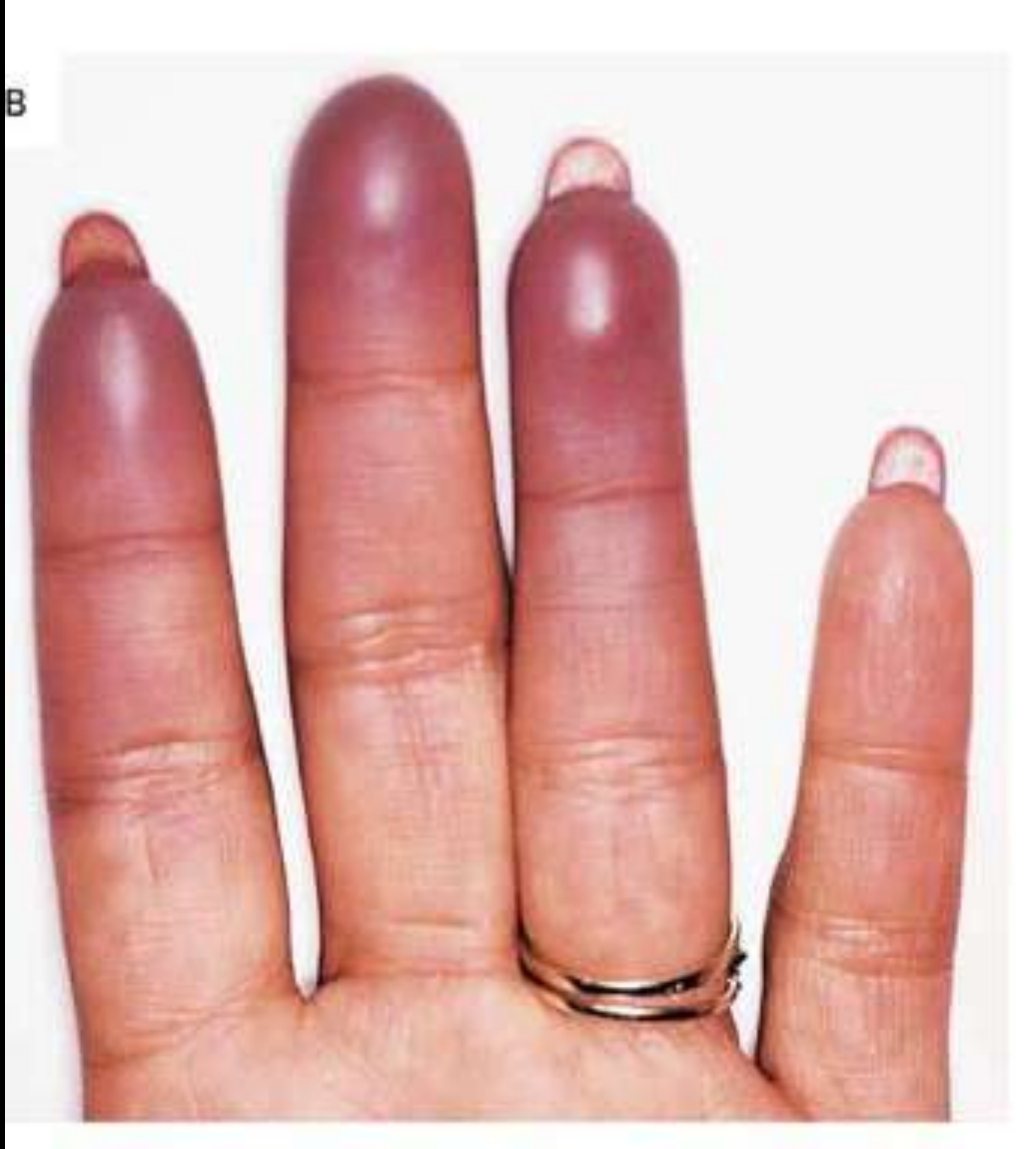
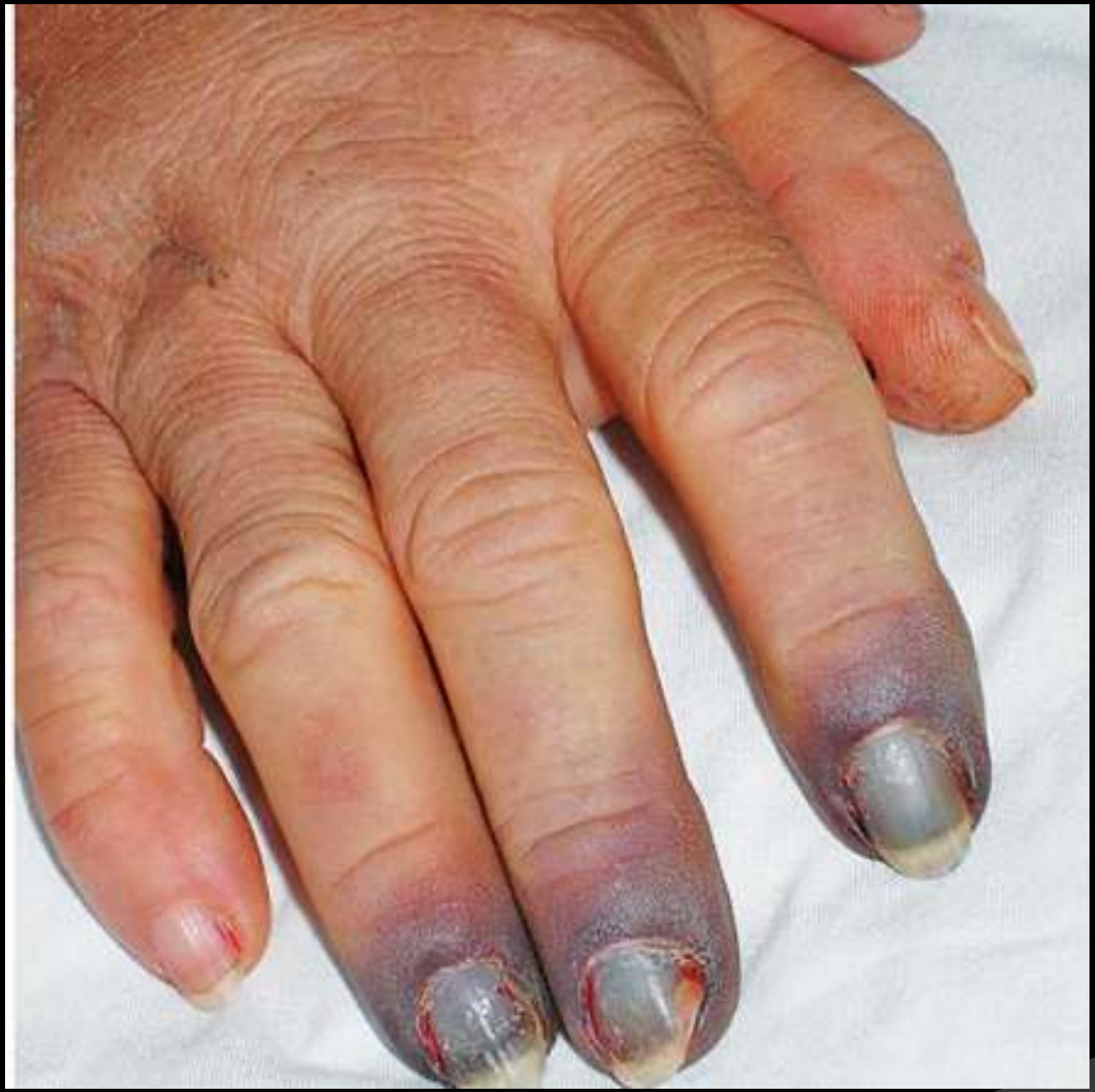
Ryanoid phenomena :

Three phases : first pallor then cyanosis and finally redness

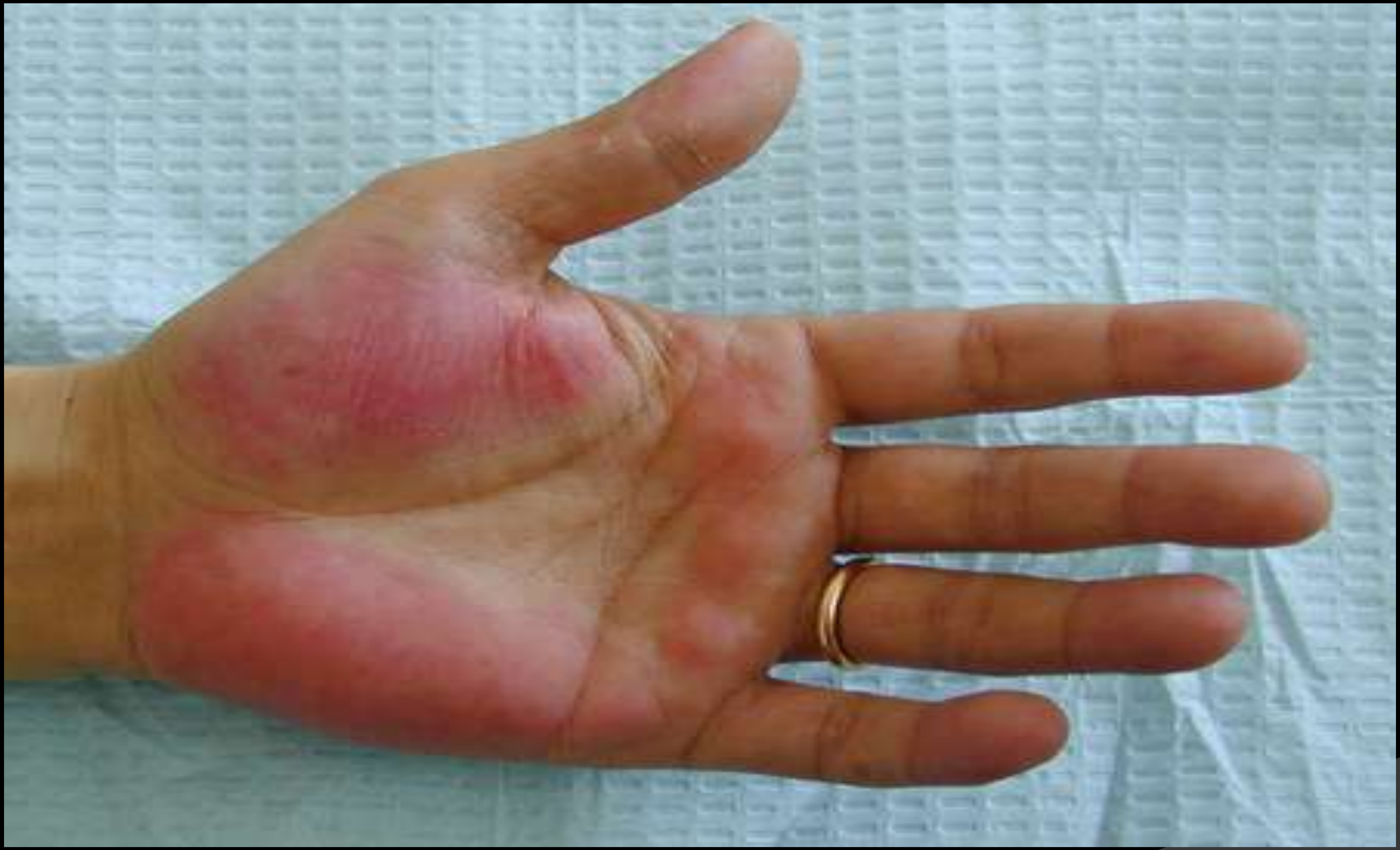


Digital infarction
[DIC, vasculitis, sever Raynaud's disease]

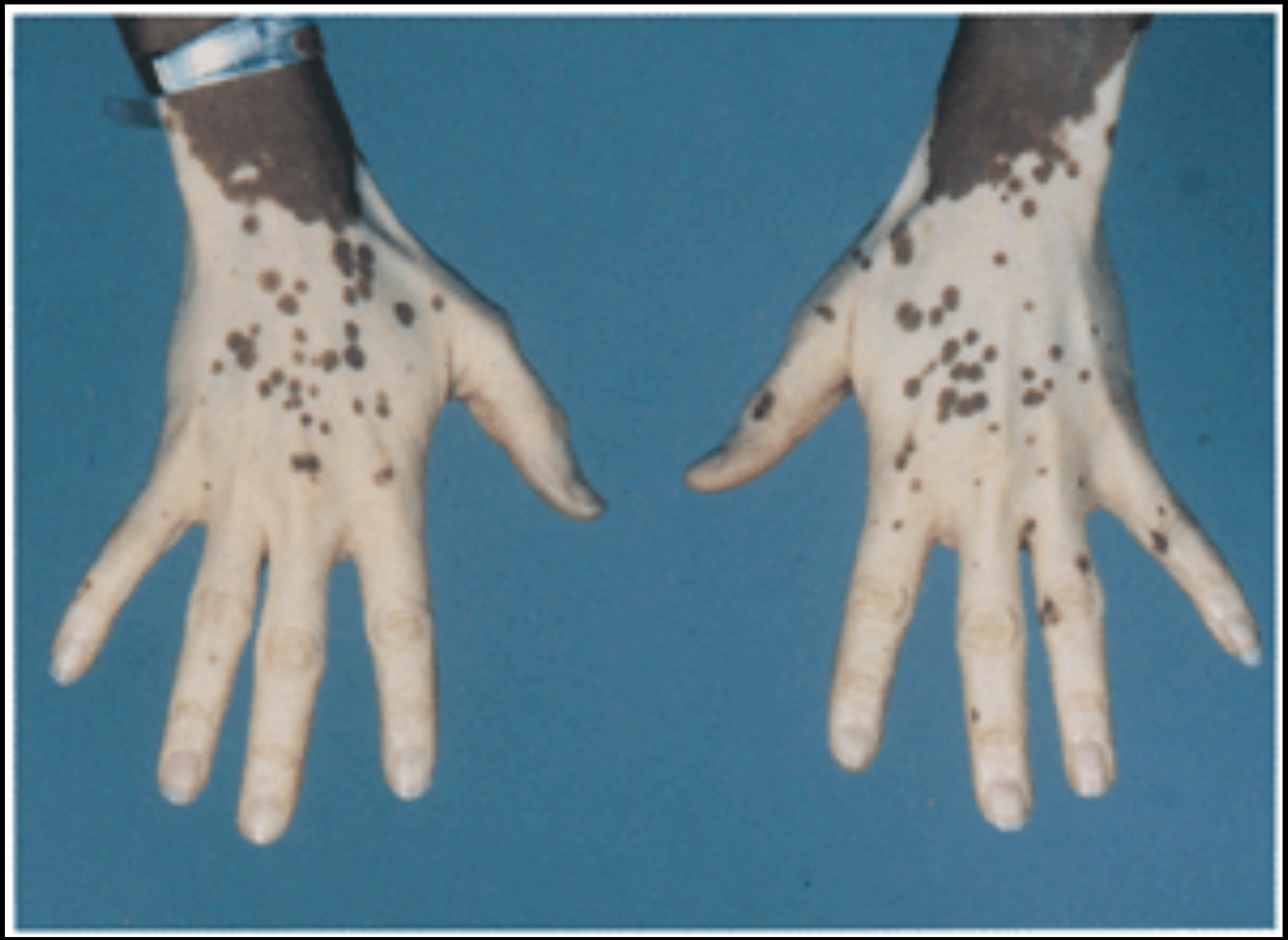


Palmar erythema

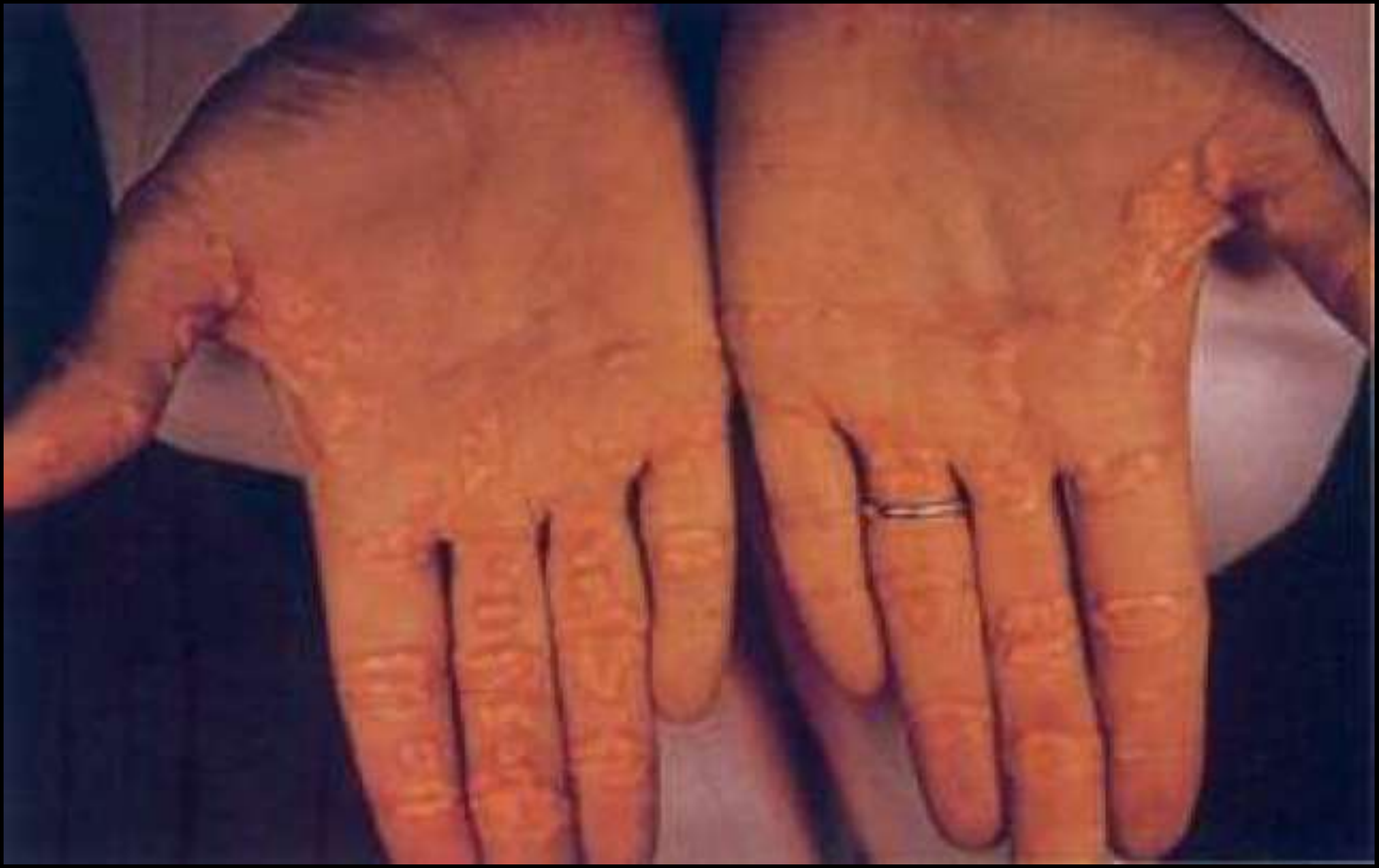
[liver disease, thyrotoxicosis, pregnancy and fever]



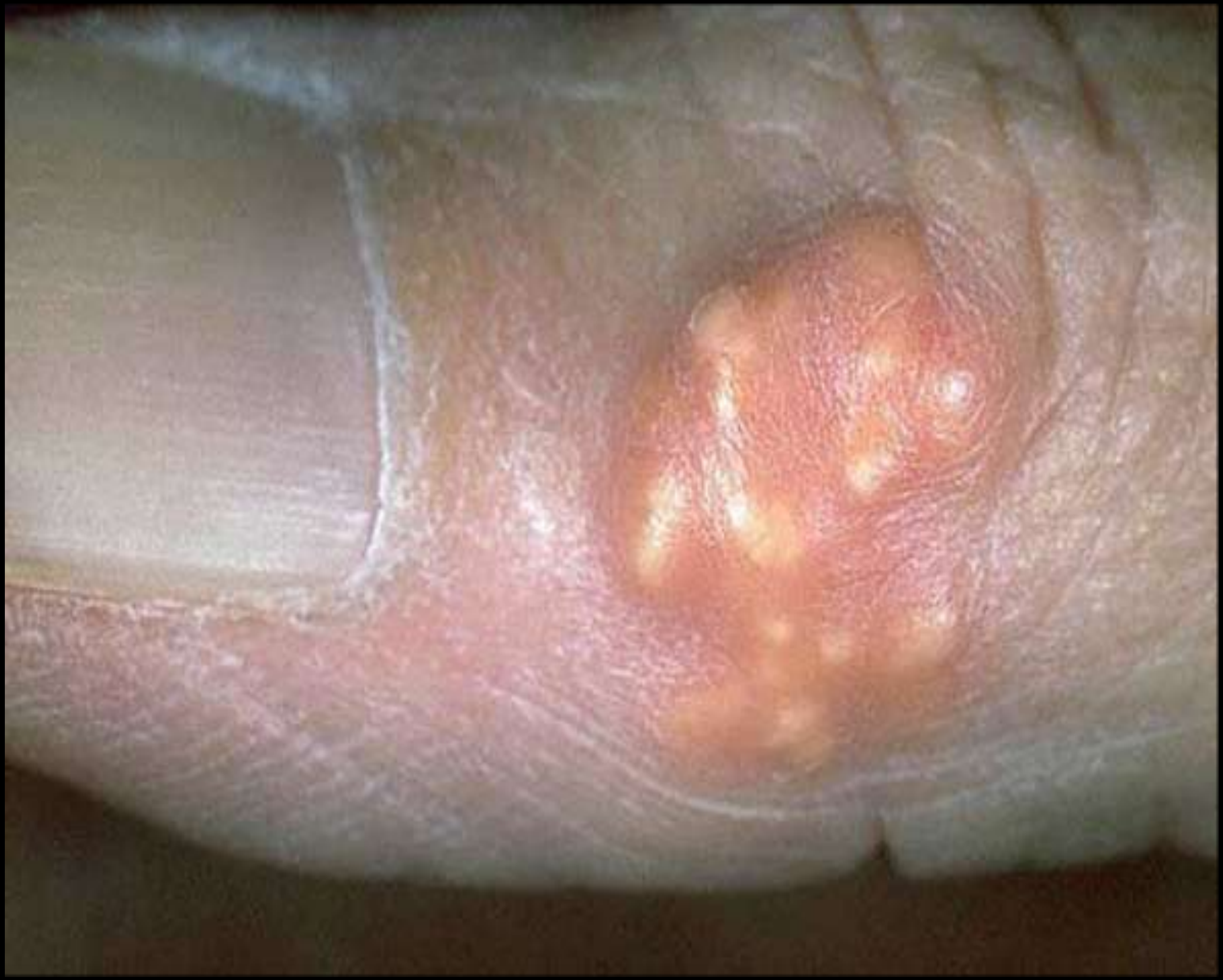
Depigmentation of skin [vitiligo with possible associated autoimmune diseases]



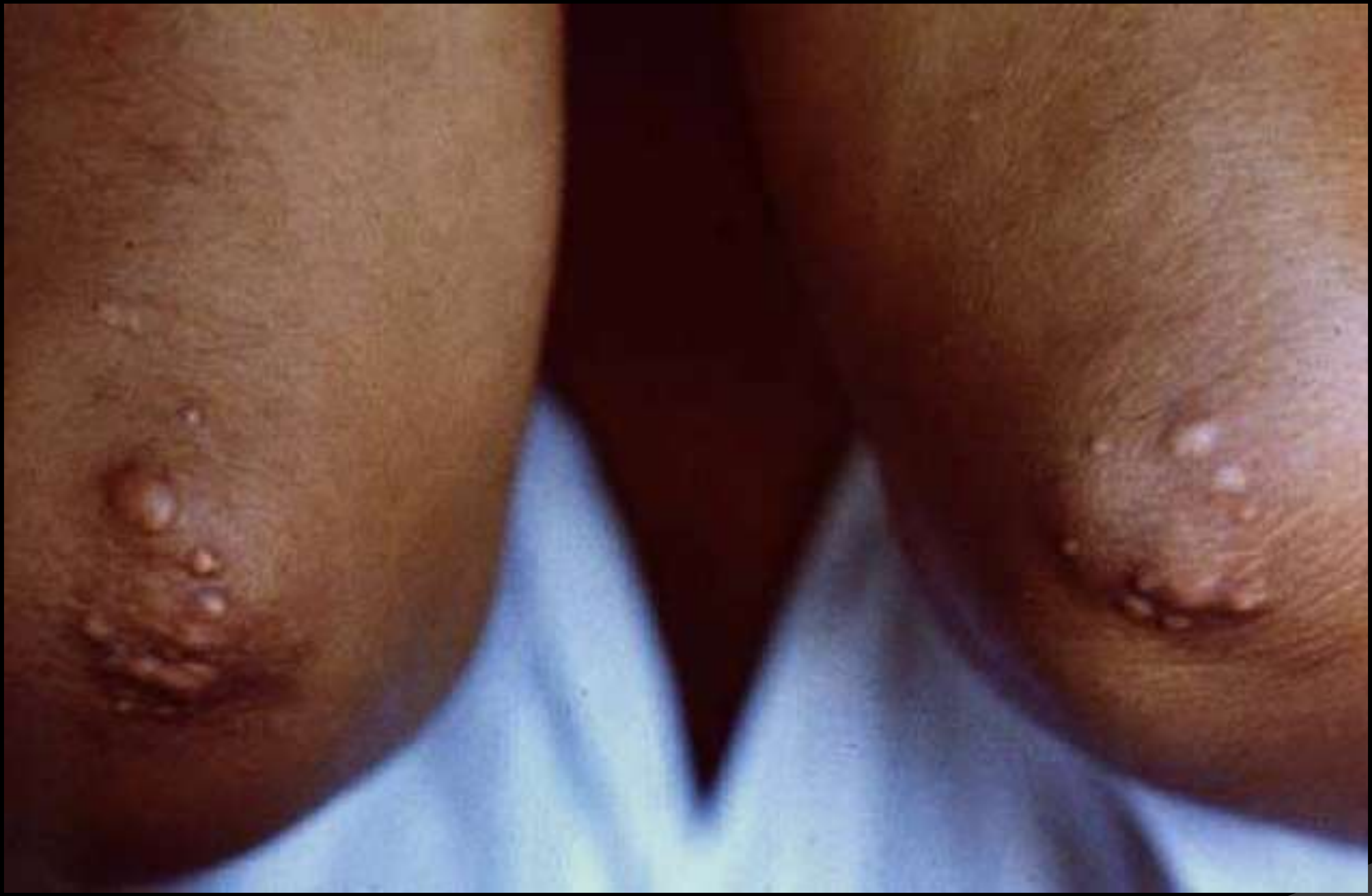
Palmar xanthoma [familial hypercholesterolemia]



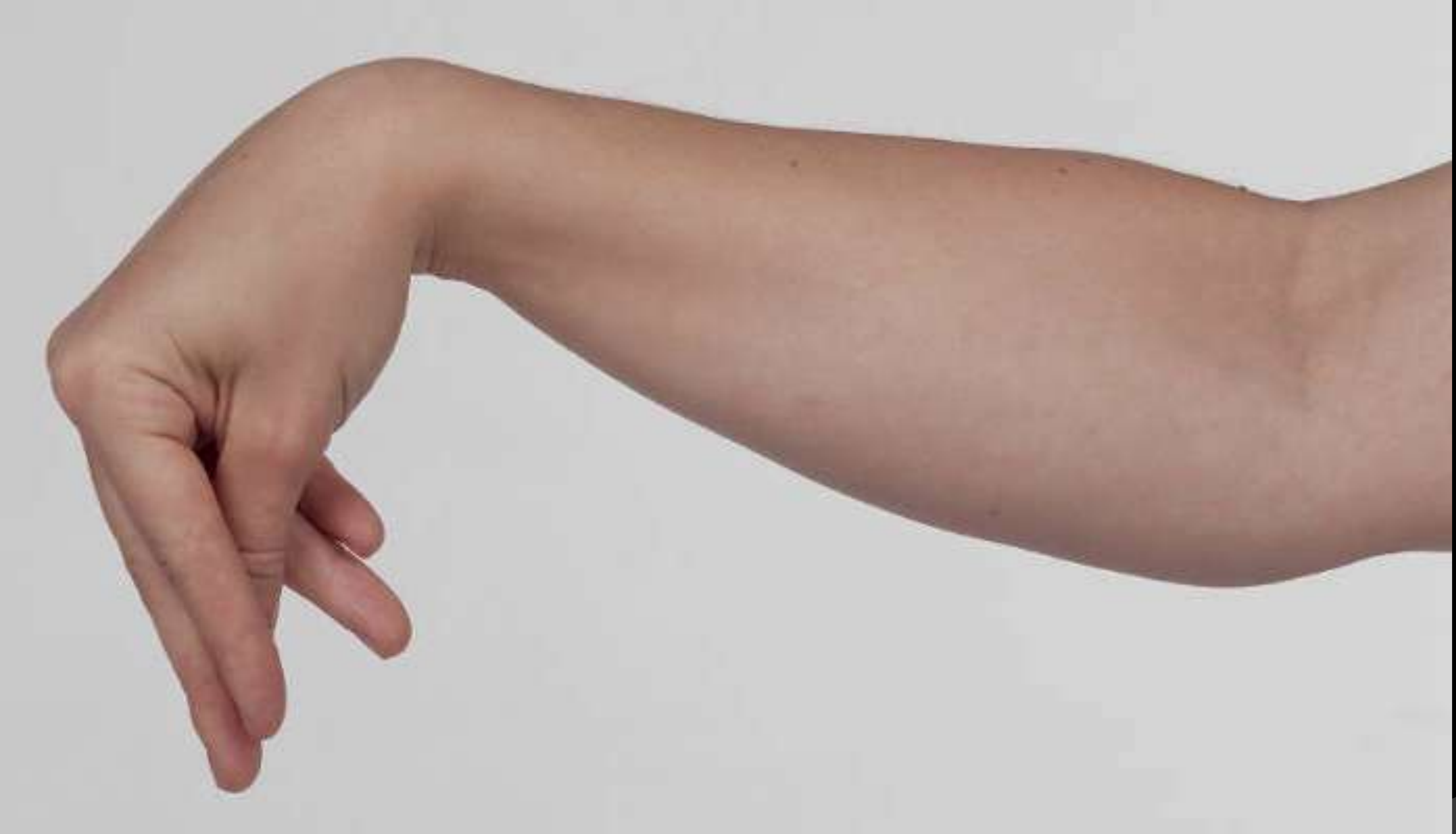
Tendon xanthoma of thumb [familial hypercholesterolemia]



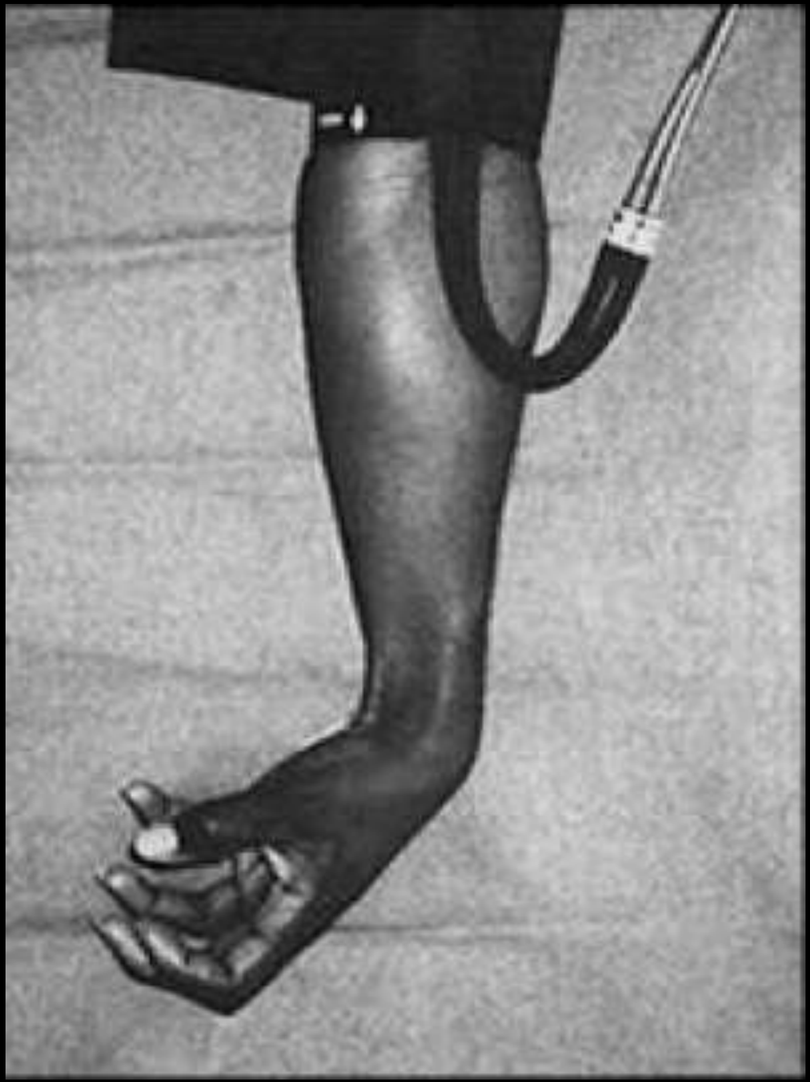
Tuberous xanthoma
[familial hypercholesterolemia]



Carpal spasm [hypocalcemia]



Trousseau's signs [hypocalcemia]

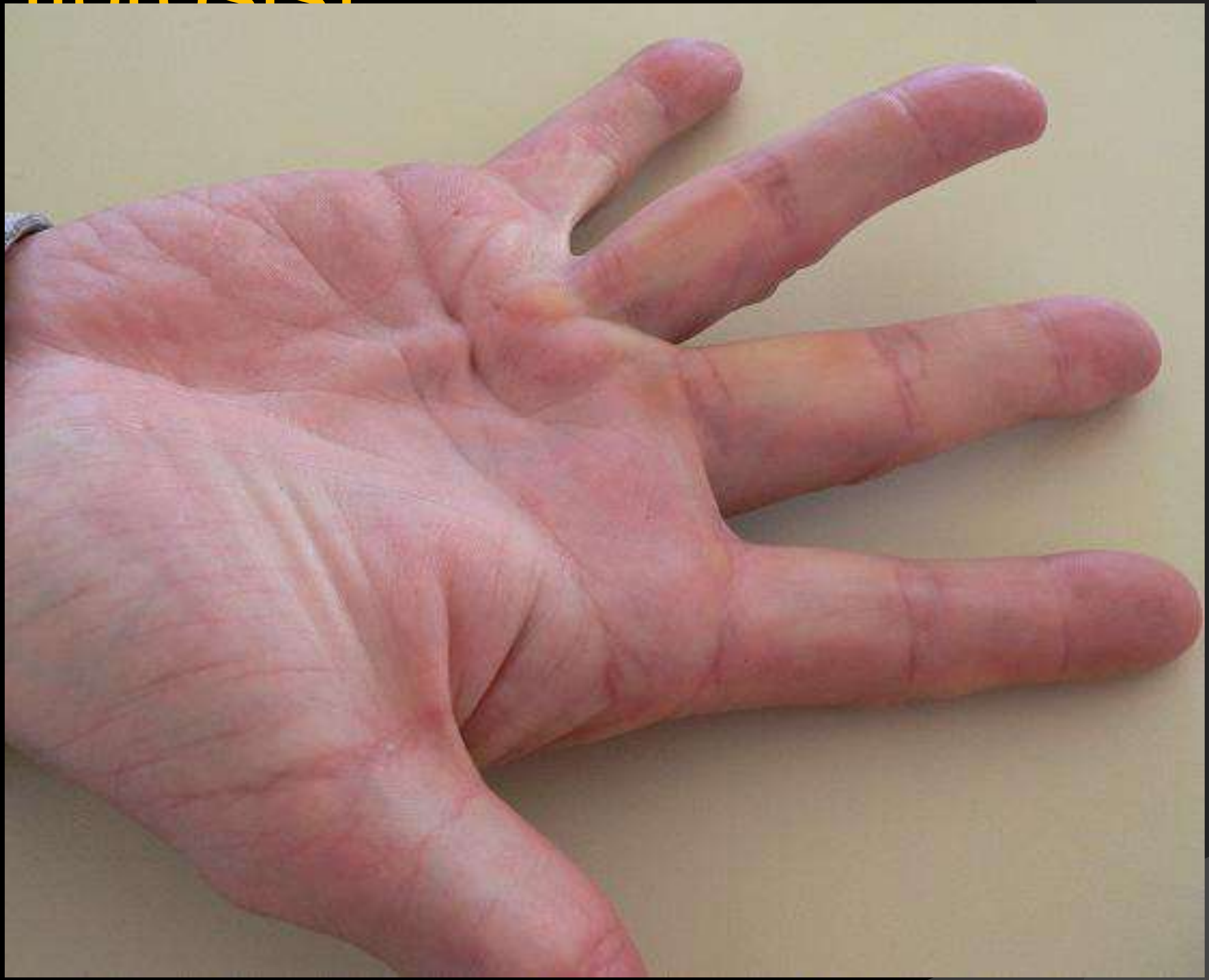


- trousseau's sign : abnormal carpopedal spasm after hypoxia induced by sphygmomanometer , in hypoxia ionized Ca will become unionized , hence decreasing Ca concentration that is soluble in the blood)
- caused by hypocalcemia , the causes of which were mentioned in chvostek sign

تقلص دوبويترن

Dupuytren's contracture

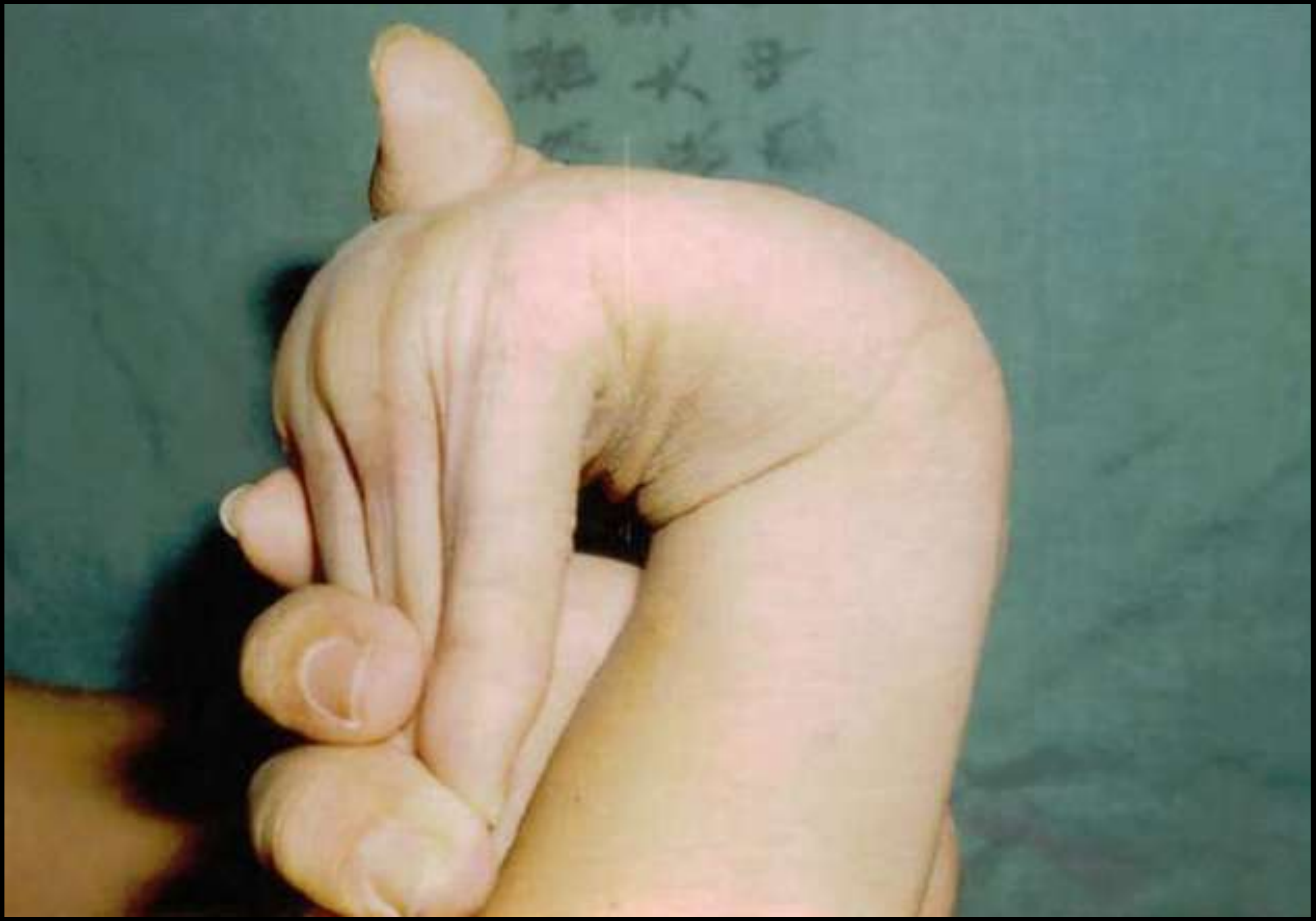
[alcoholic liver disease, DM, idiopathic fibrosis]



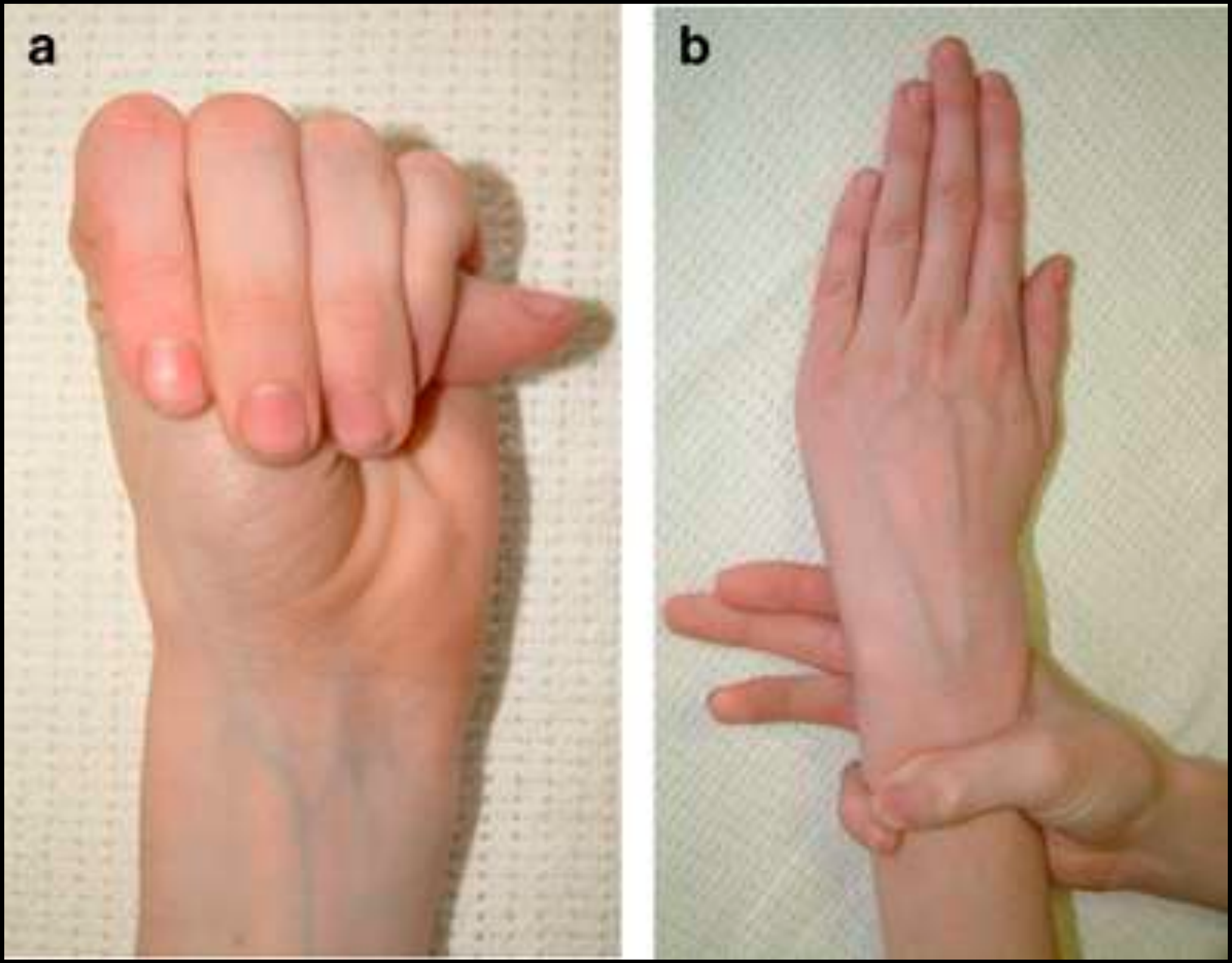
: limitation of the extension of the ringer and little fingers and is painless

Familial , cirrhosis , Diabetes mellitus , rheumatoid arthritis

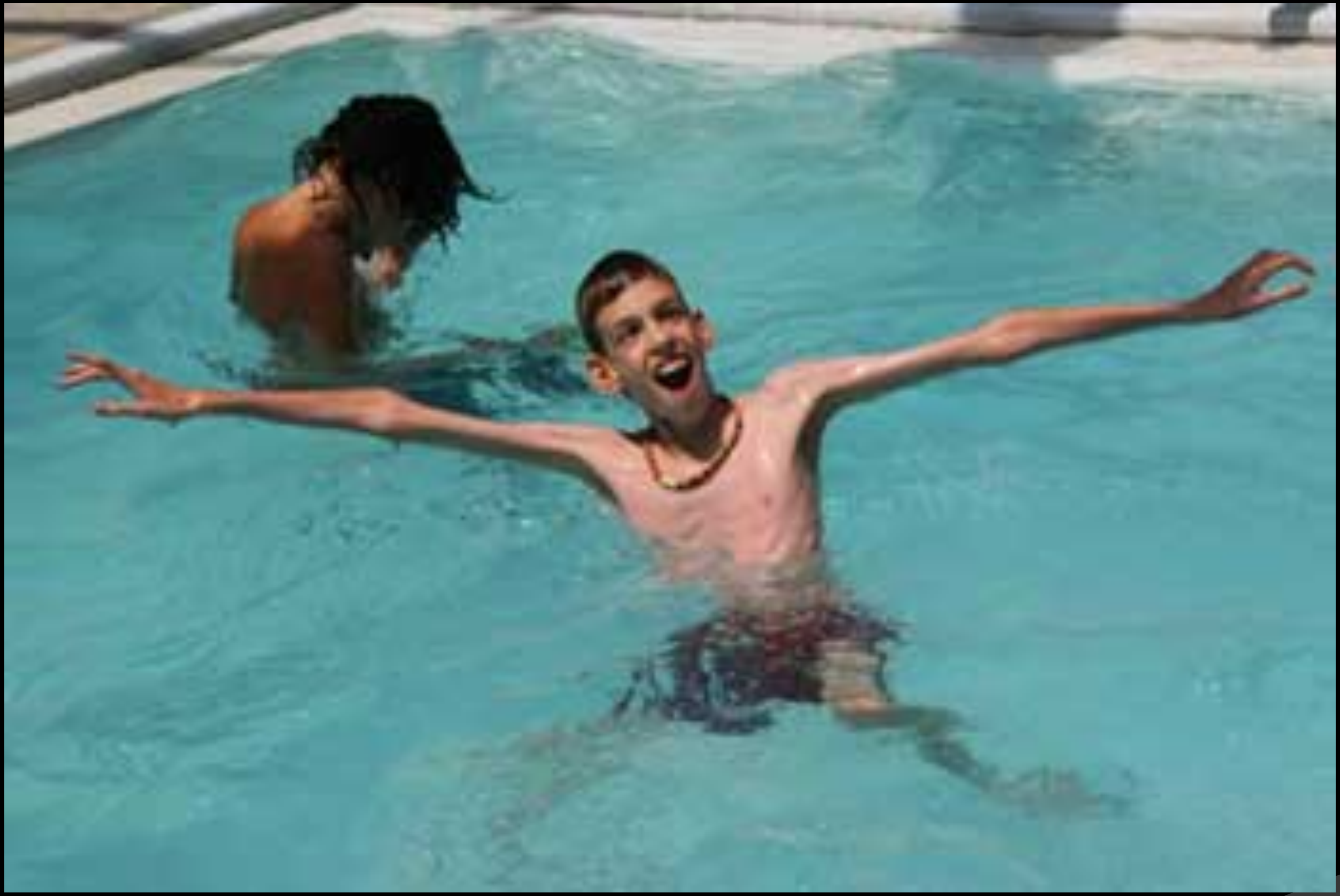
Hypermobility of the joints
[Ehlers - Danlos syndrome]



Long fingers (arachnodactyly) [Marfan syndrome]



Long arm span [Marfan syndrome]



Erythematous plaques with adherent silvery scale.

[psoriasis]

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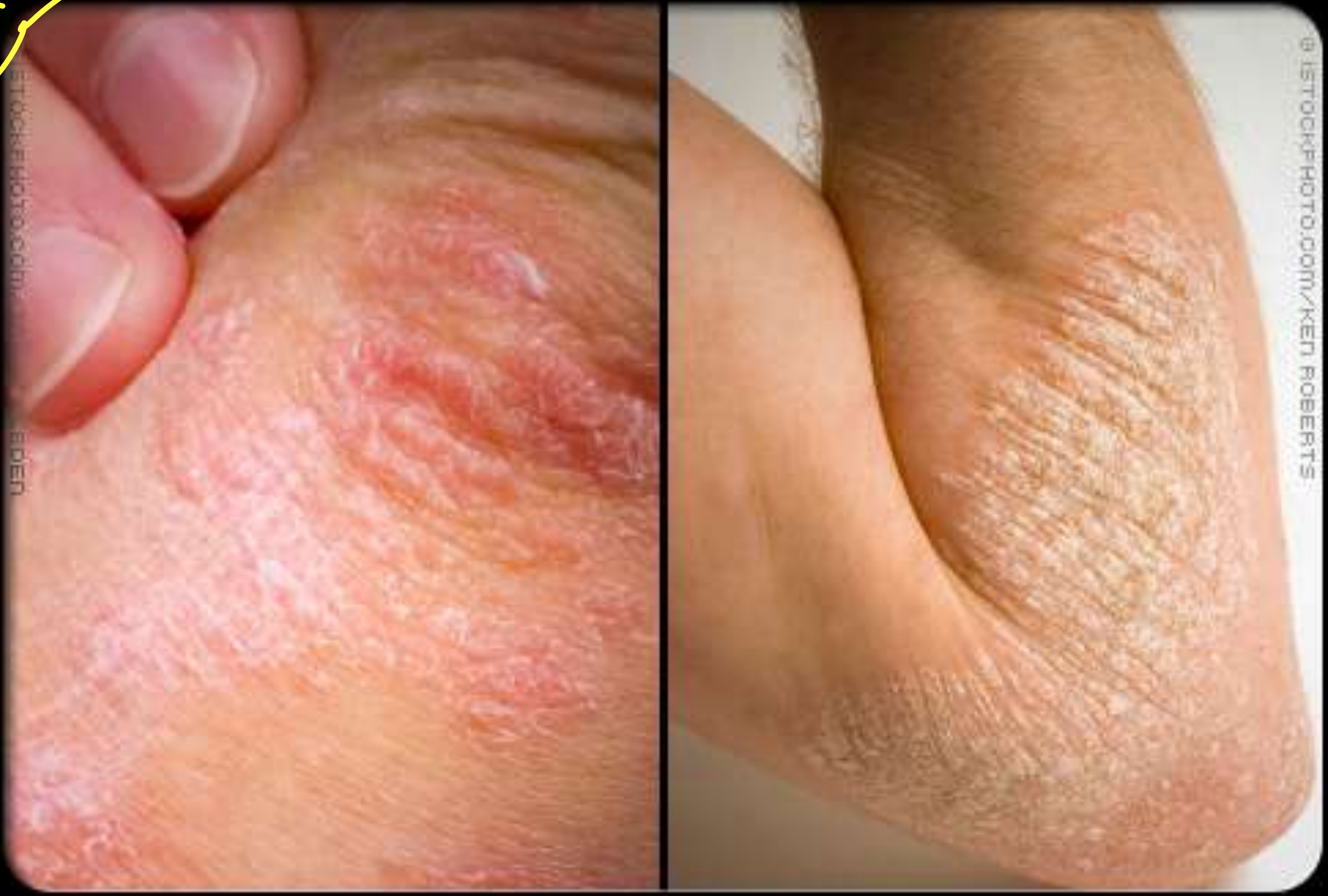
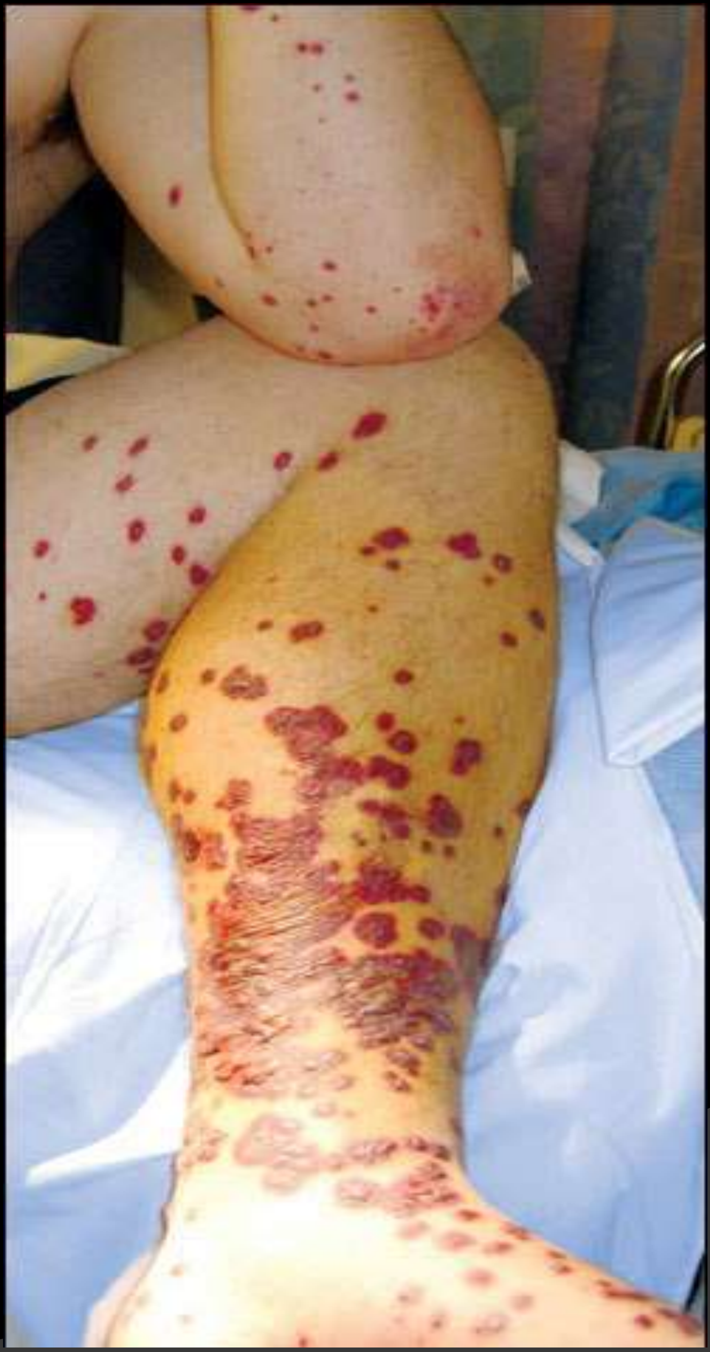


Purpura [thrombocytopenia, Henoch-Schönlein purpura]



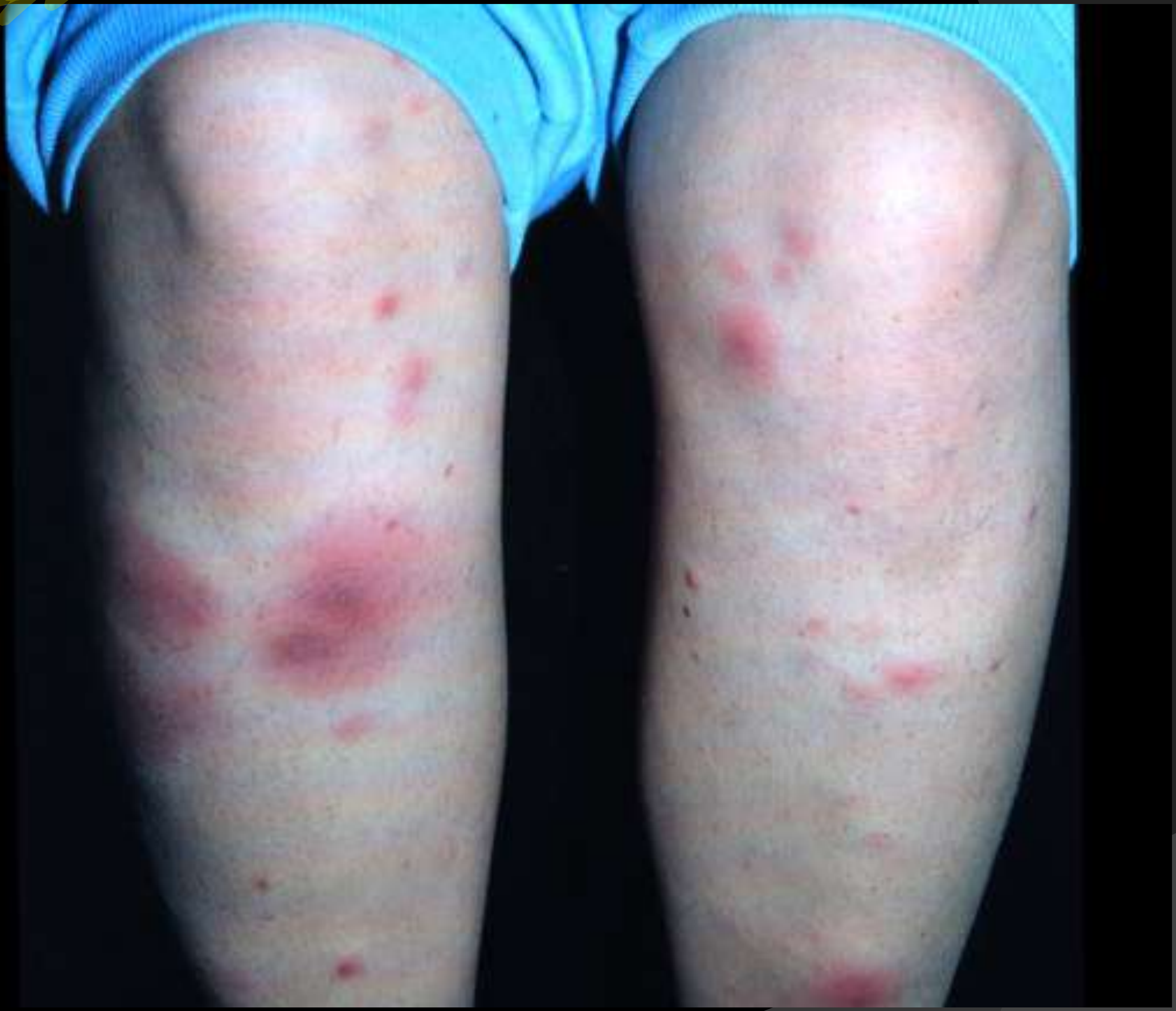
Petechia (smallest)

Purpura (intermediate in size)

Ecchymosis (largest)

Erythema nodosum

[TB, streptococcal infection, IBD, sarcoidosis, OC]



Painful and tender erythematous discoloration of the anterolateral surface of the shin (tibia) bilaterally

Differential diagnosis : cellulite and DVT

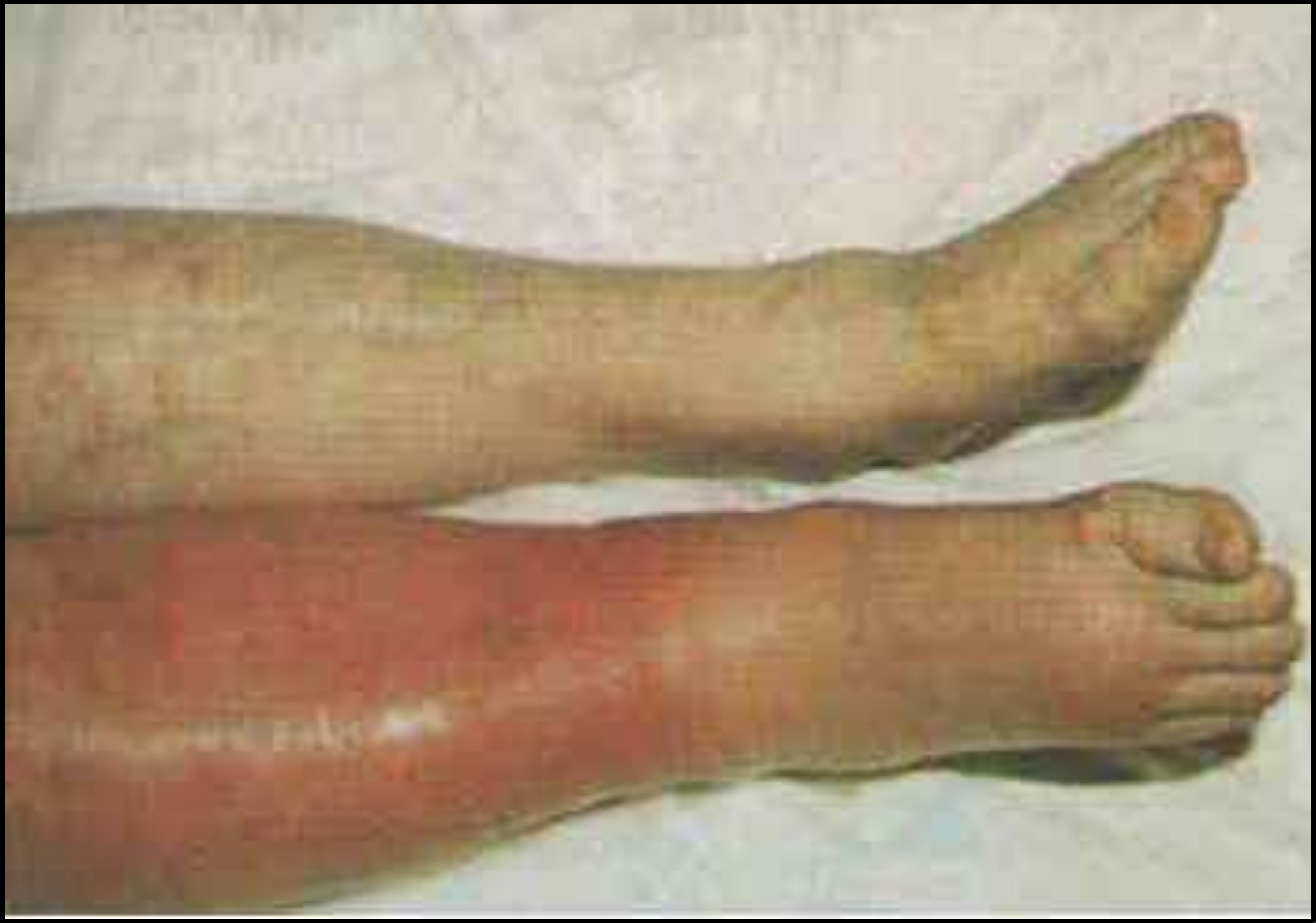
infectious : (Streptococcus and TB) ,

Non infectious :

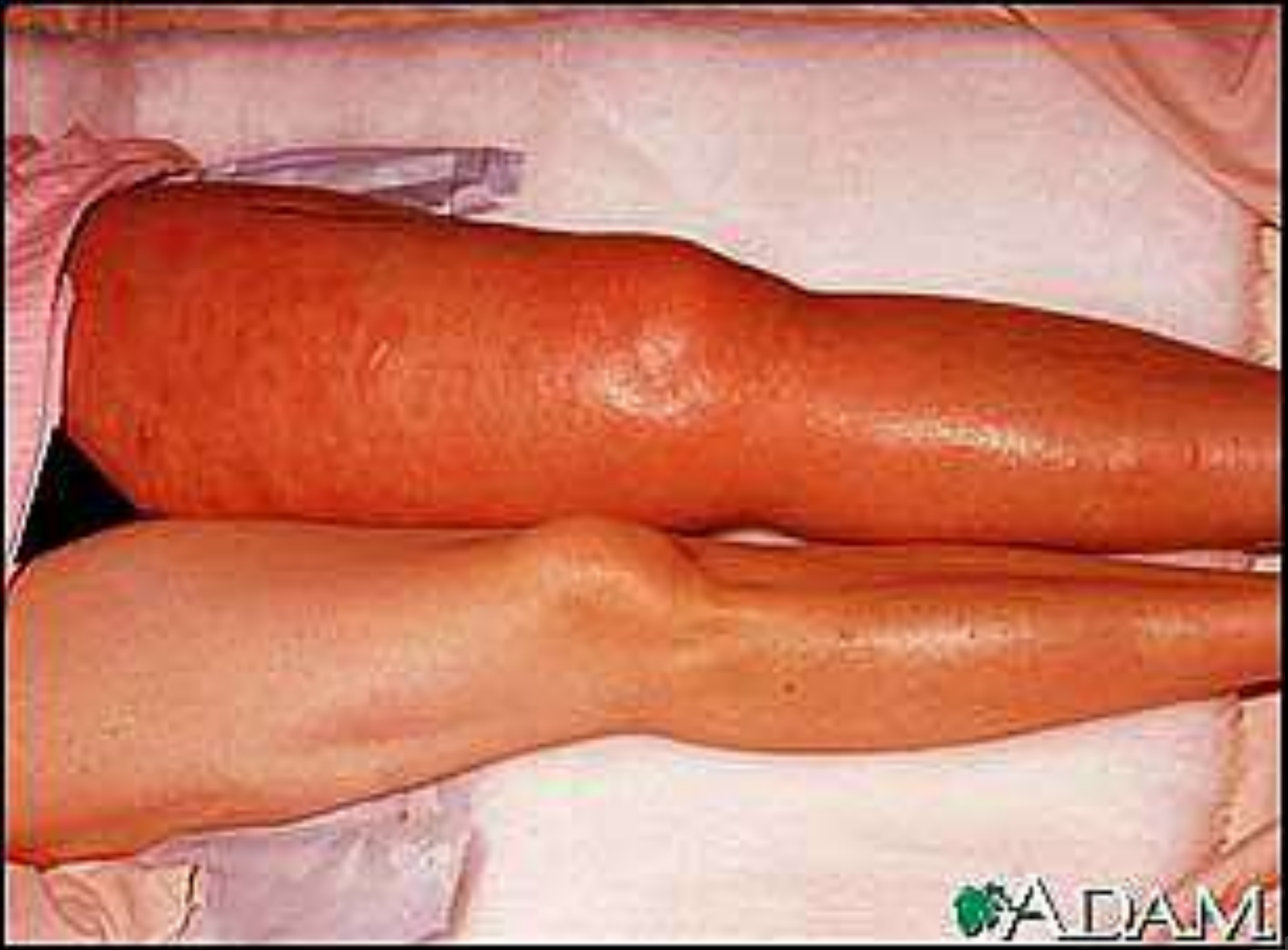
Drugs : OCP

Inflammatory : behcet disease

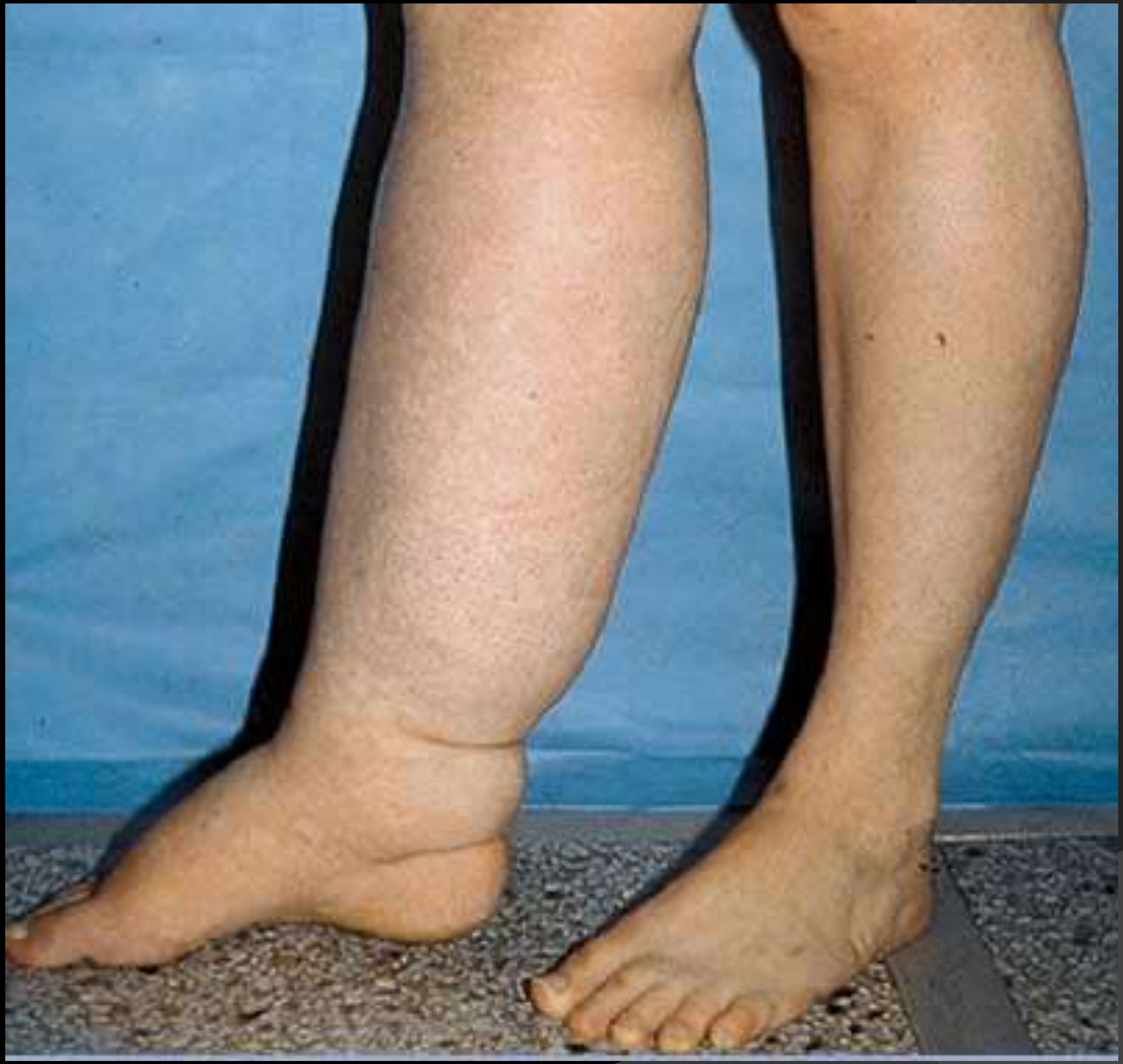
Swelling and redness of the right leg [acute DVT]



Swelling and redness of the left leg [extensive DVT]



Unilateral leg edema [lymphatic obstruction]



Uni-lateral leg swelling : causes

DVT (most serious)

(Most important test is doppler)

Cellulitis

Lymphatic obstruction

Arterial blockage

Spider nevi
[chronic liver disease]

telangiectasia

: trunk and face

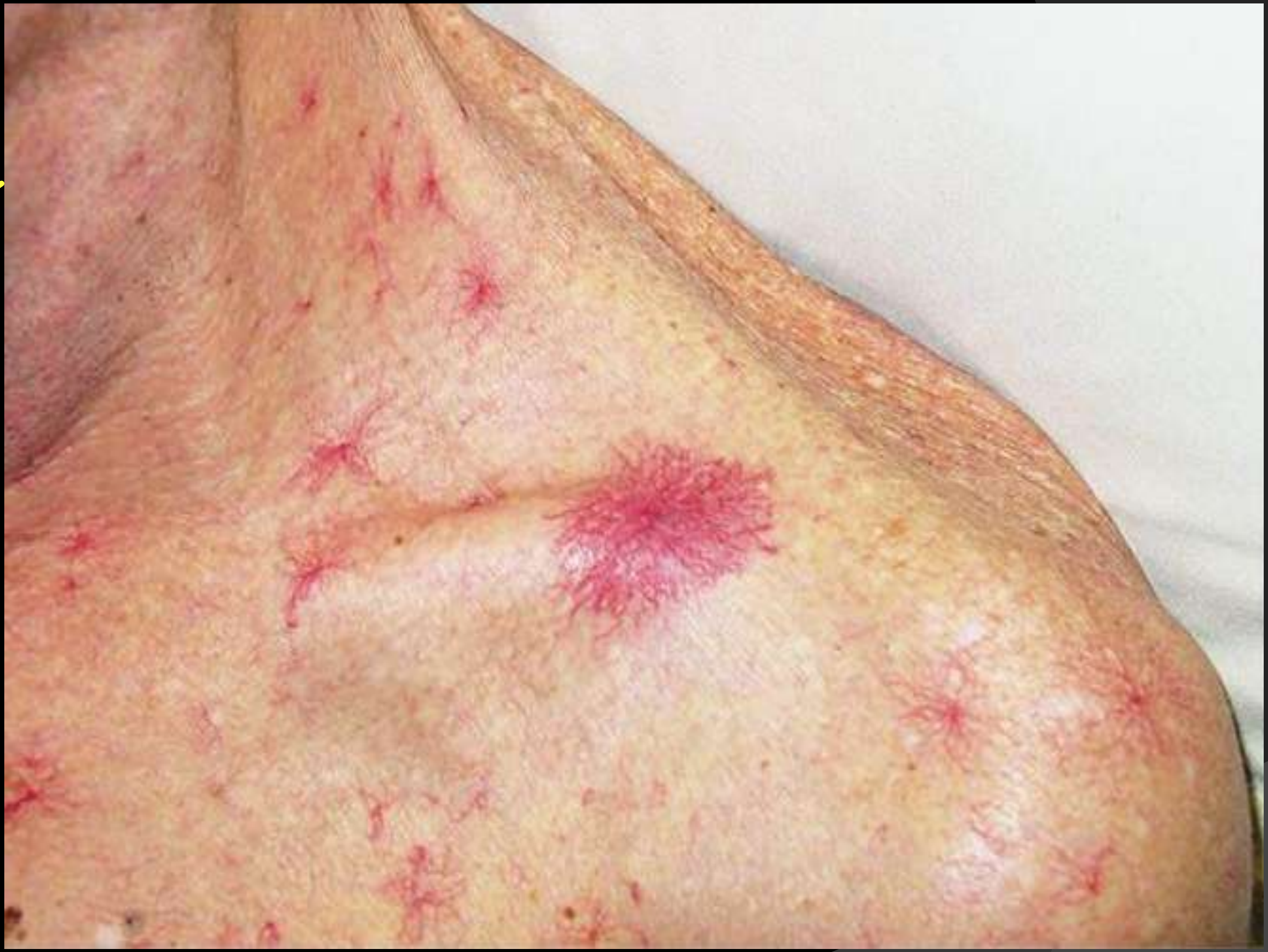
Rapture arterioles or capillaries

Causes :

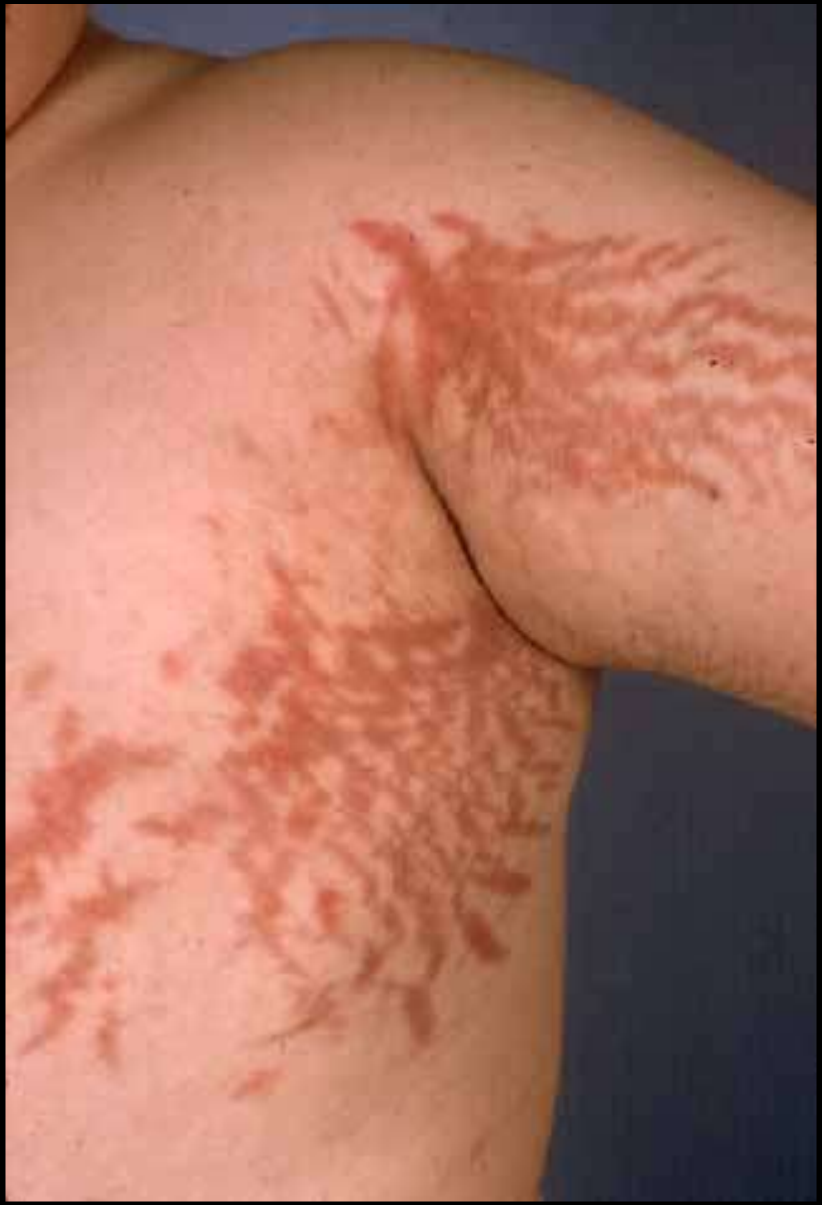
Ageing

Cirrhosis

Malignancy



Purplish striae [Cushing syndrome, recent weight gain]



Ascites

[liver cirrhosis, nephrotic syndrome, heart failure, TB peritonitis, malignancy]

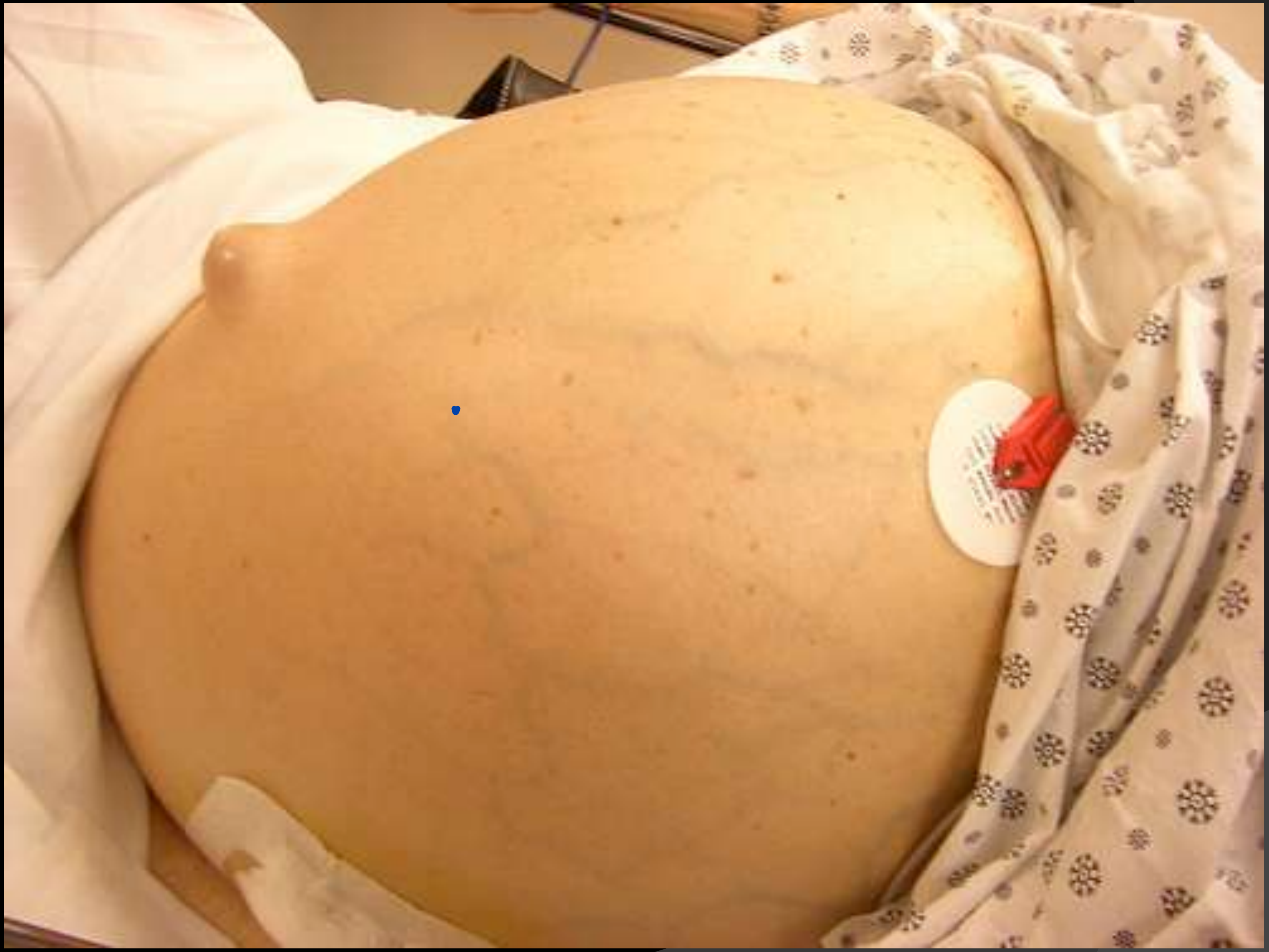
Abdominal distention : caused by

Fluid

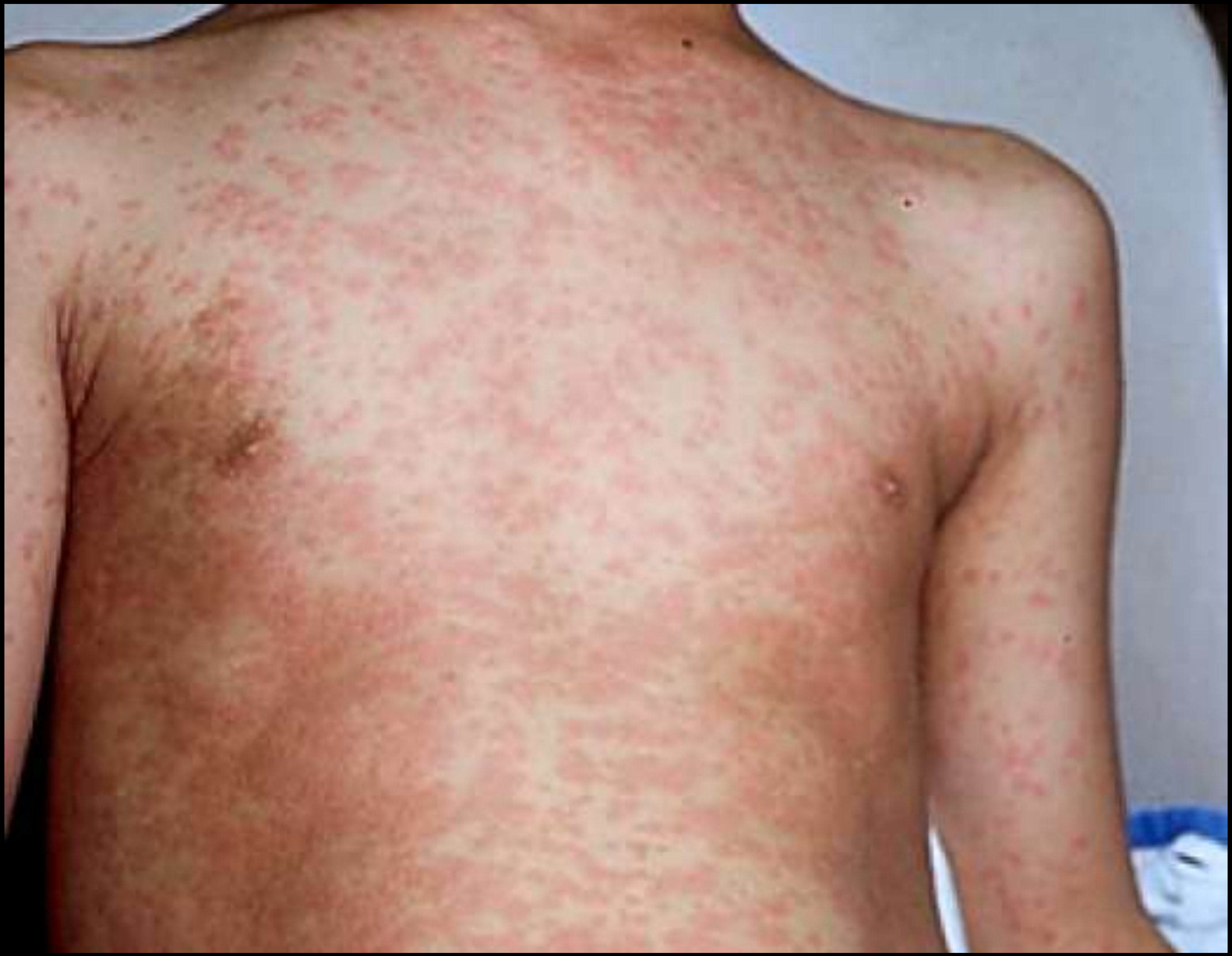
Feces

flatus

Fetus



Maculopapular rash [viral infections like measles, drug allergy]



Clinical examination

- Neck examination. ✓
- Chest examination. ✓
- Cardiac examination. ✓
- Abdominal examination. ✓
- Neurological examination. ✓

Examination of the neck

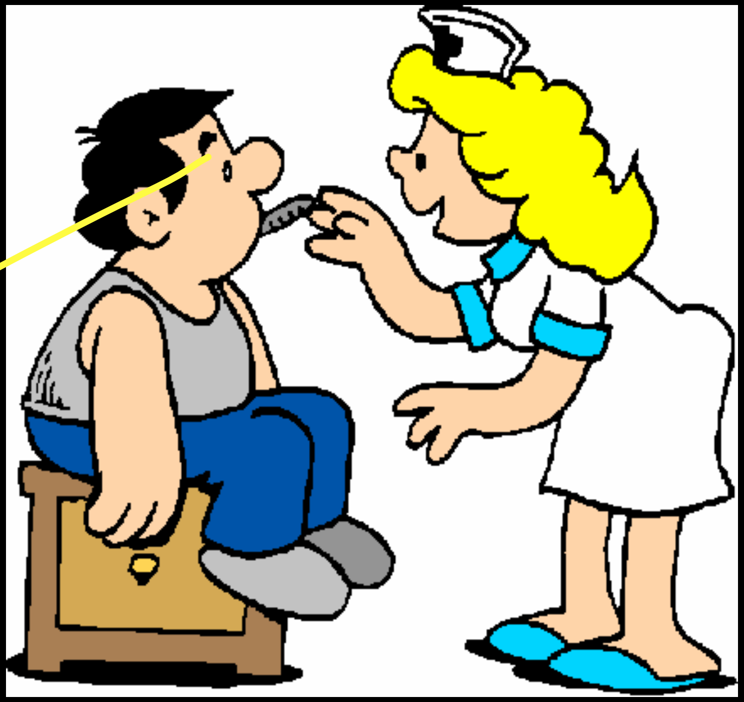
- Lymph nodes.
- Thyroid.
- Carotid pulsation.
- JVP.

Lymph O O Thyroid

// // JVP

carotid

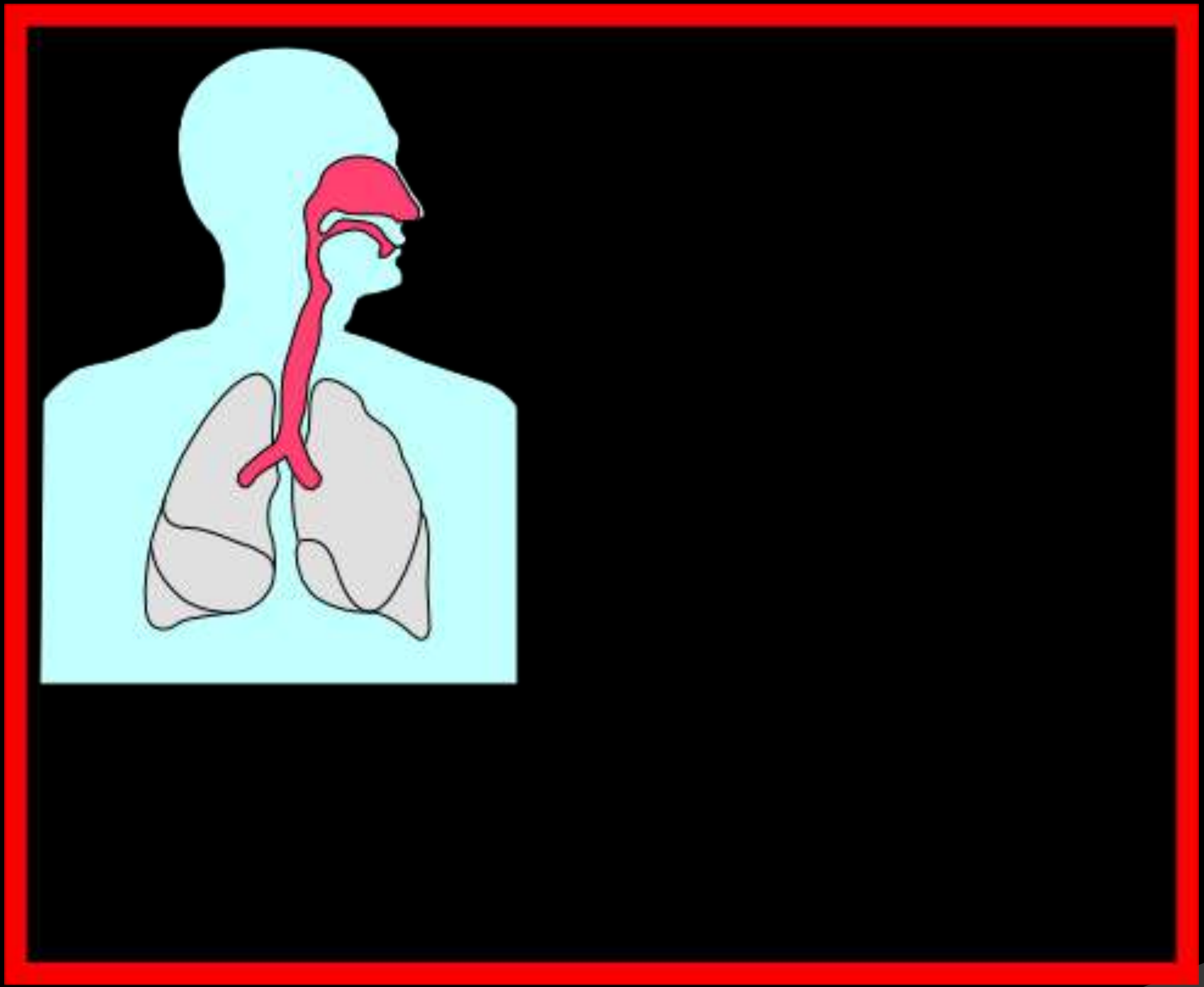
Click on the screen



Examination of the chest

- Inspection.
- Palpation.
- Percussion.
- Auscultation.

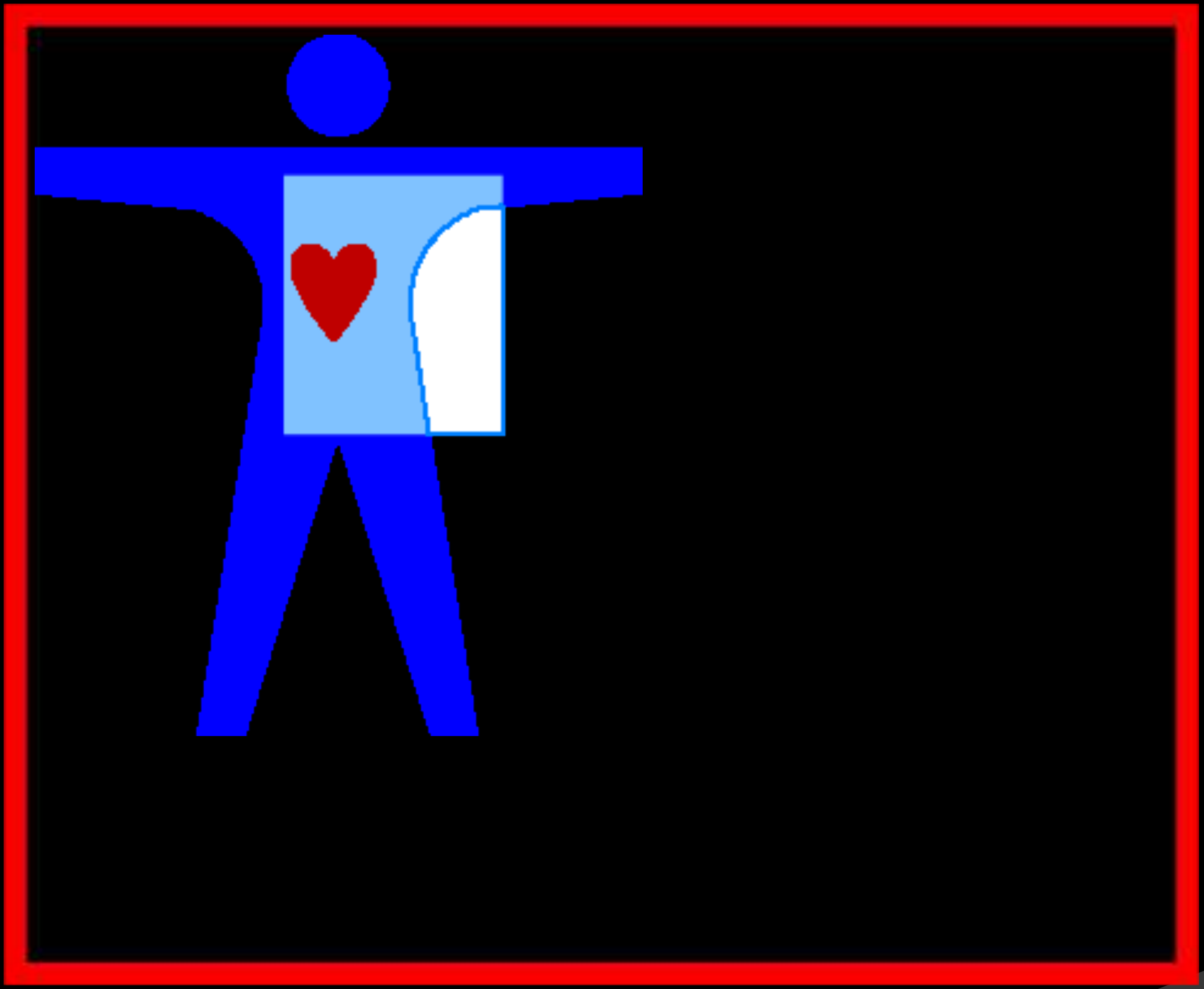
Click on the screen



Examination of the precordium

- Inspection.
- Palpation.
- Percussion.
- Auscultation.

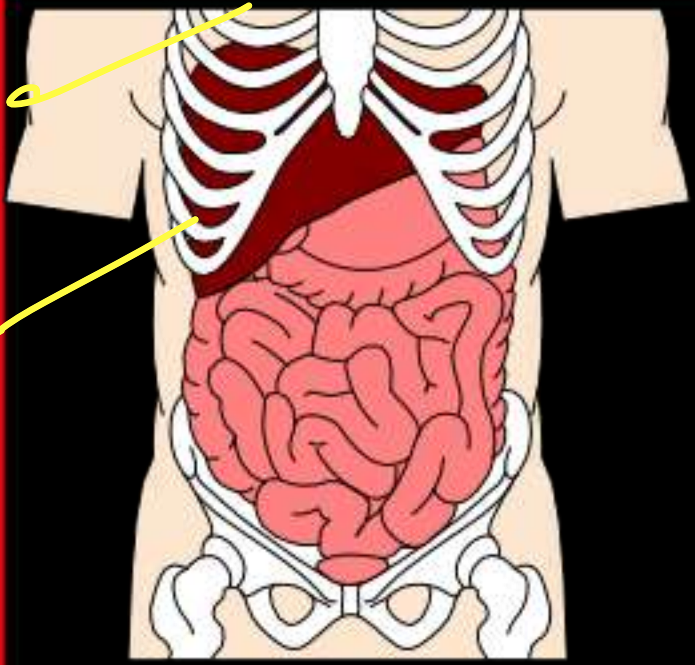
Click on the screen



Examination of the abdomen

- Inspection.
- Palpation & percussion of the abdominal wall.
- Palpation & percussion of the liver & spleen.
- Palpation of aorta.
- Auscultation.

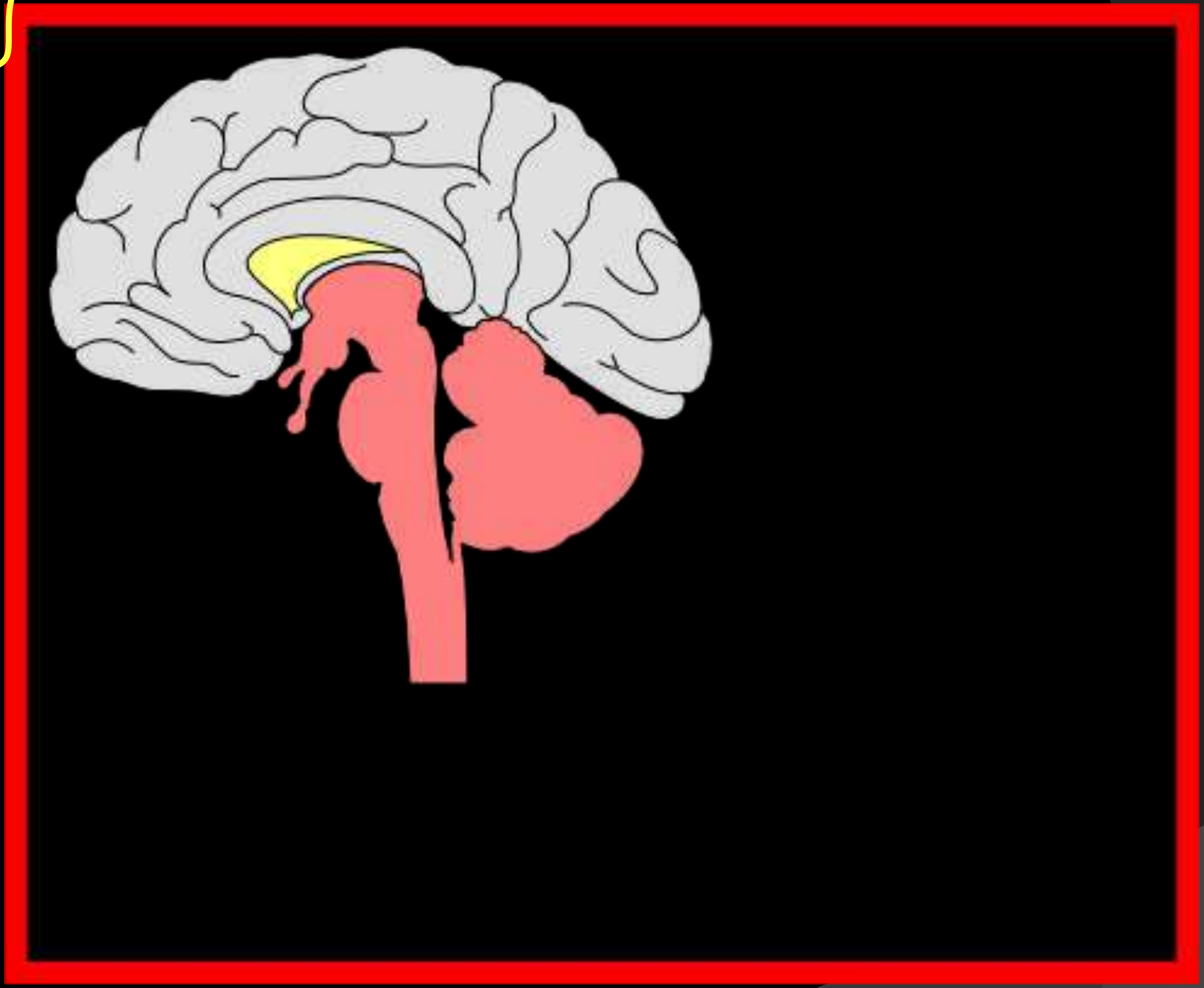
Click on the screen



Examination of the cranial nerves

- General observation.
- Examination for meningeal signs.
- Examination of each cranial nerve.

Click on the screen



Examination of the motor system

- Inspection.
- Tone.
- Power.
- Reflexes.
- Coordination.

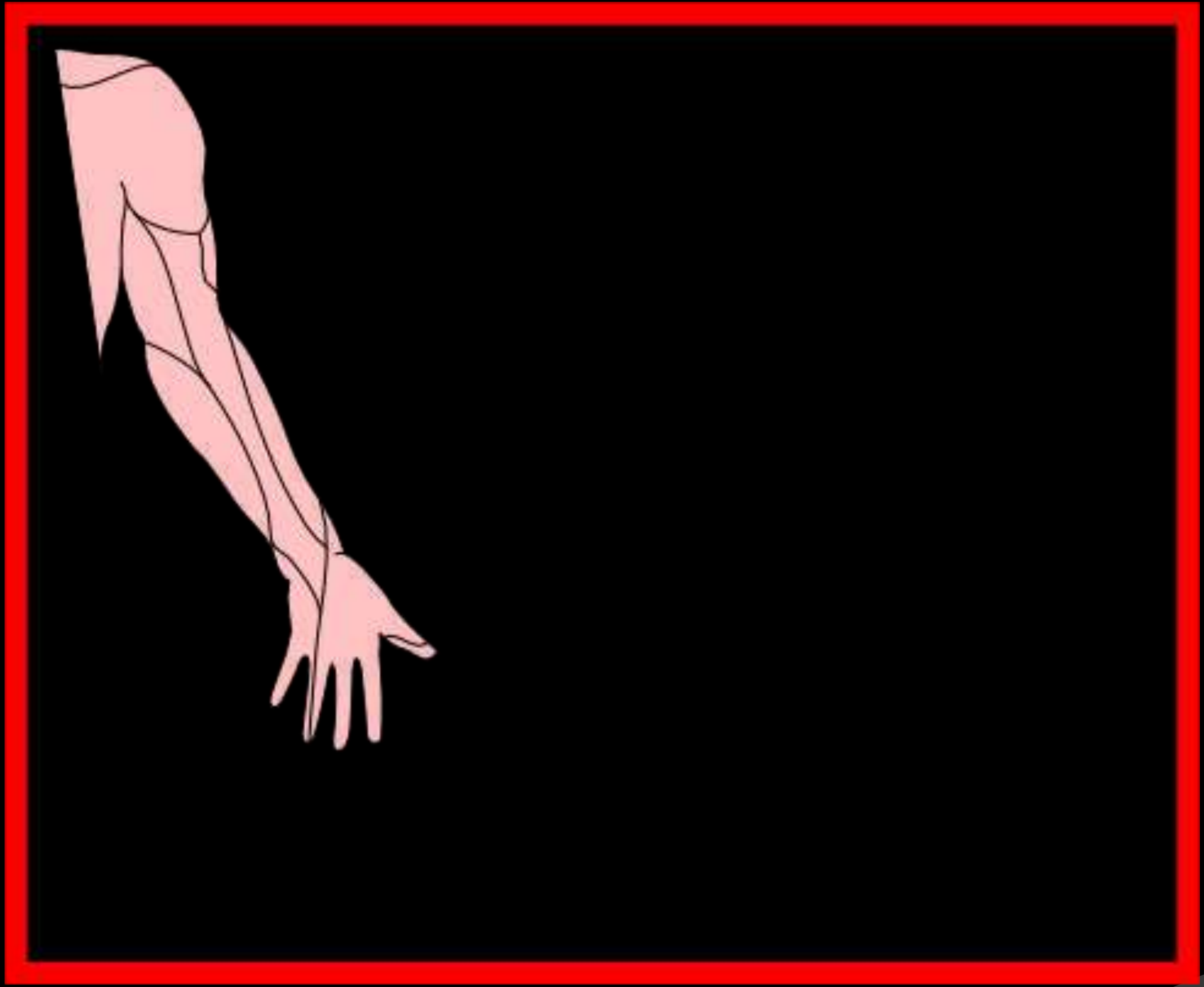
Click on the screen

inspection
Tone
power
reflex
Coordination

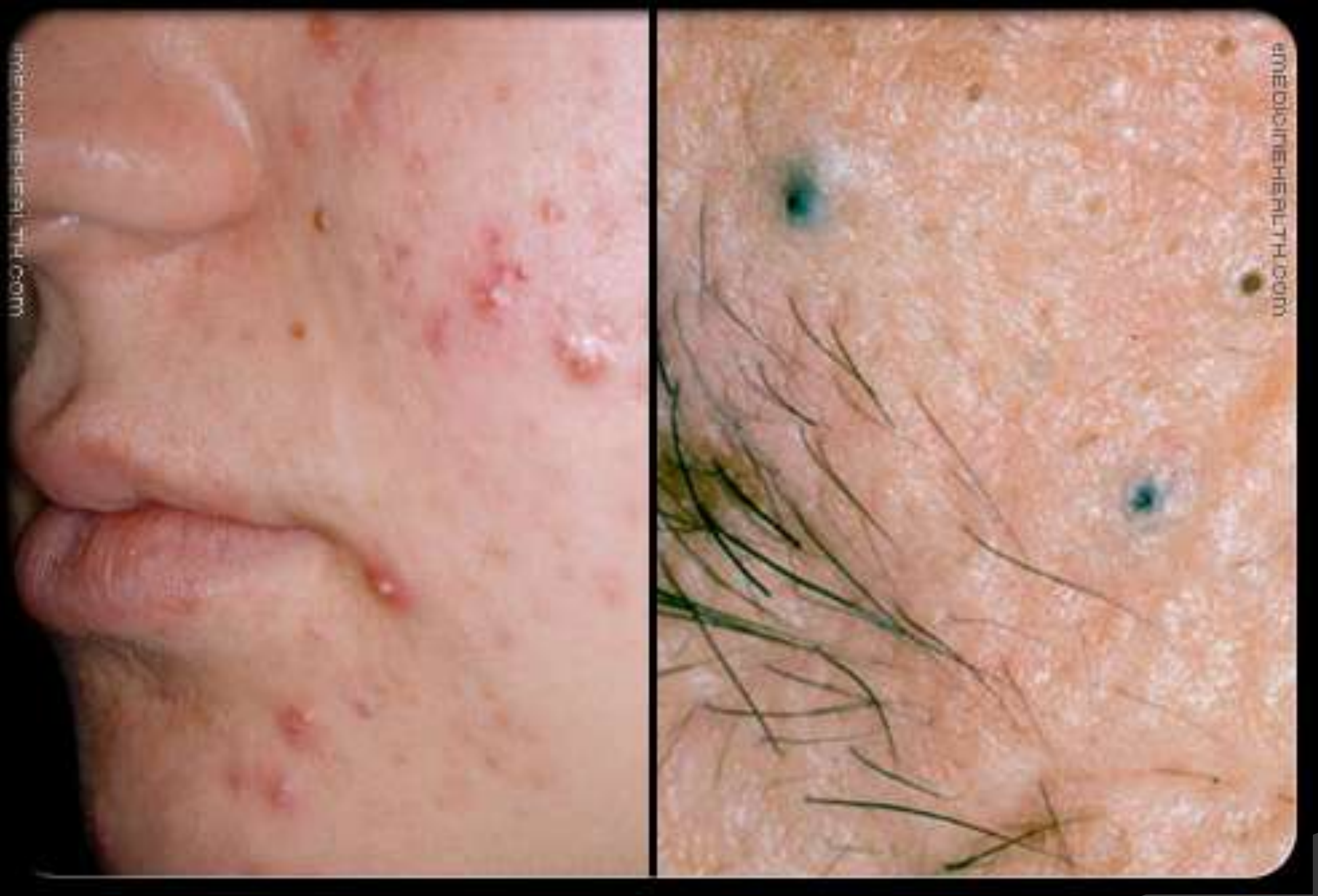
Examination of the sensory system

- Pain.
- Temp.
- Light touch.
- Vibration.
- Position.
- Romberg test.

Click on the screen

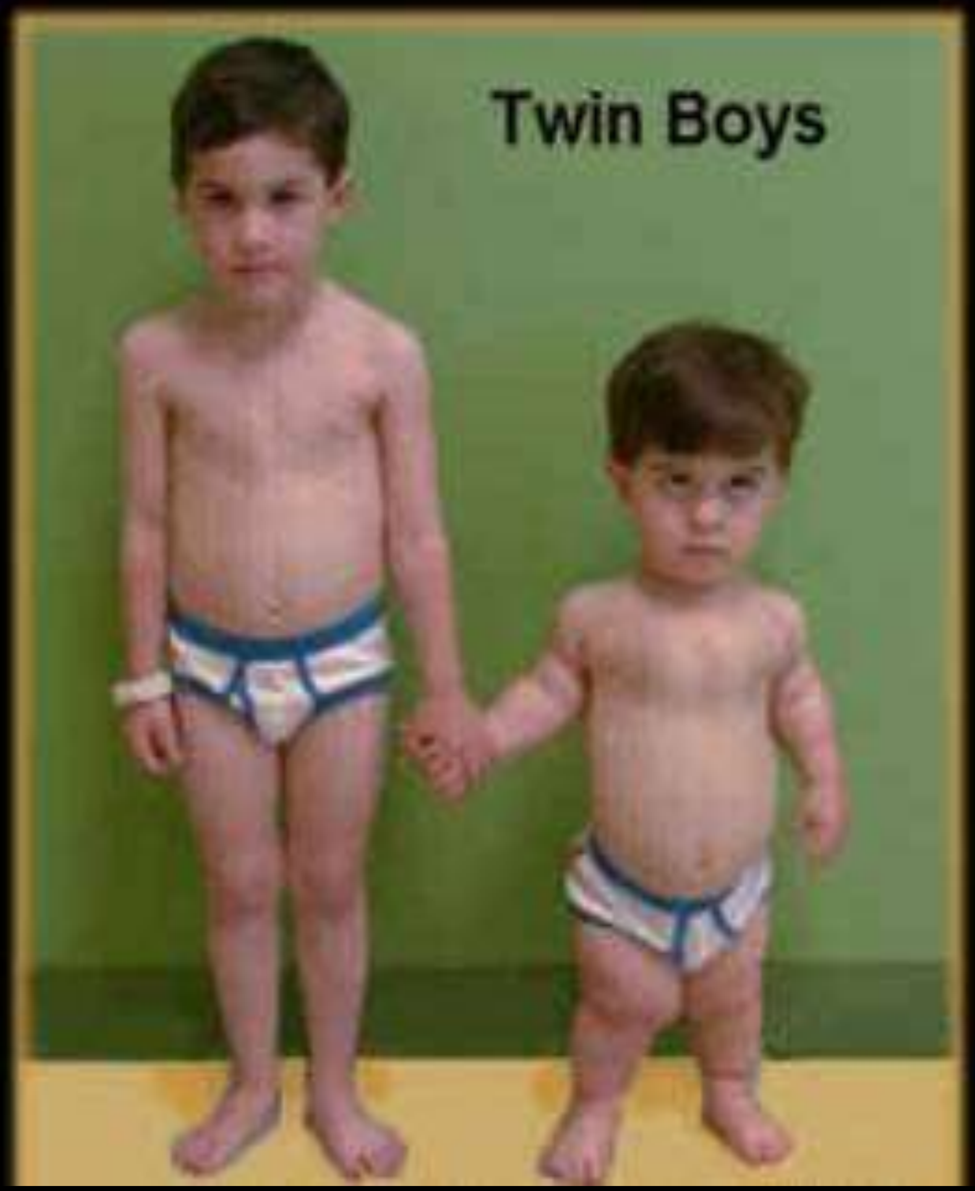


Whitehead and blackhead comedones [Acne vulgaris] (adolescence, steroid therapy)

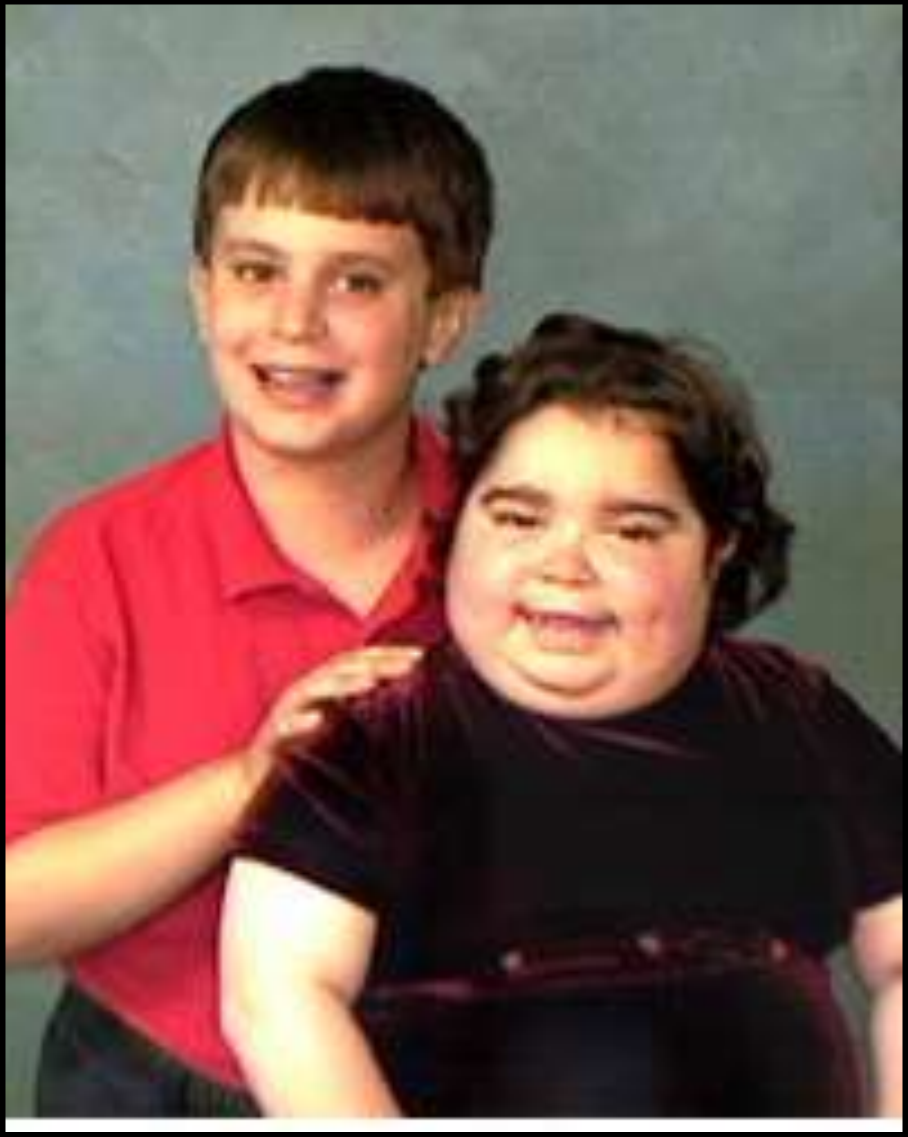


Gigantism
[GH excess before puberty]

Dwarfism [achondroplasia]



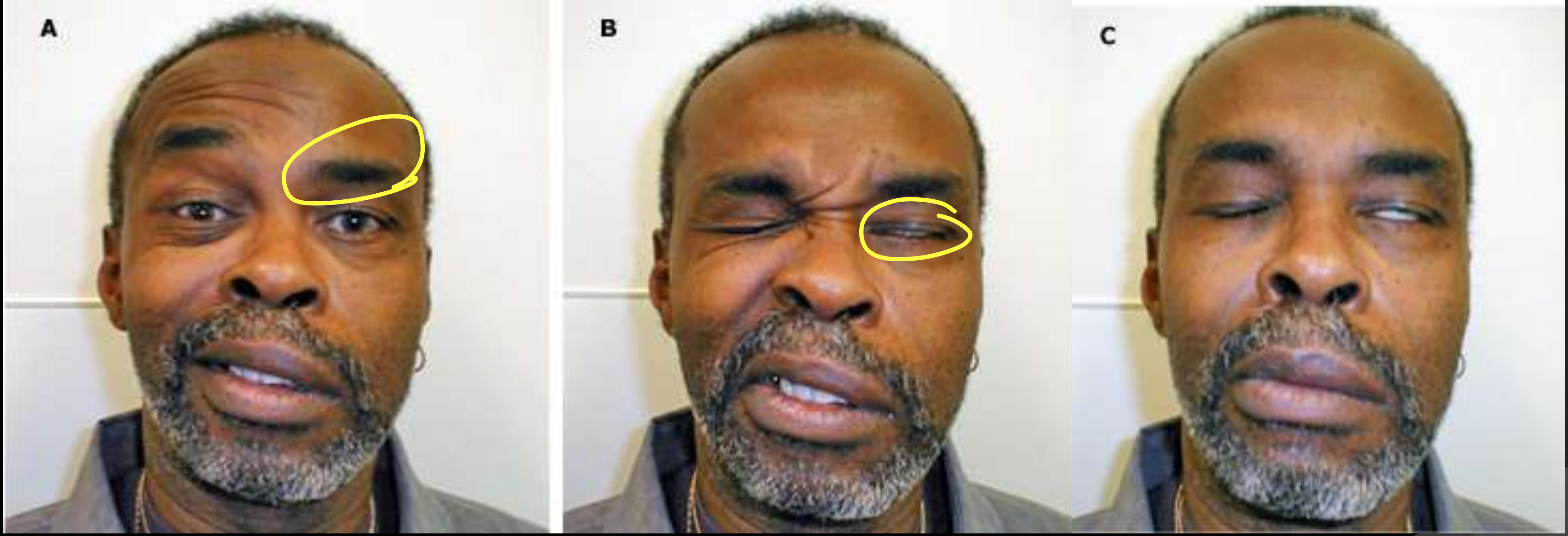
Short stature and obesity [Cushing syndrome in children]



Inability to elevate the left eyebrow and incomplete closure of left eye with Bell's phenomena.

Right side deviation of the mouth

[left LMN facial nerve palsy (Bell's palsy)]

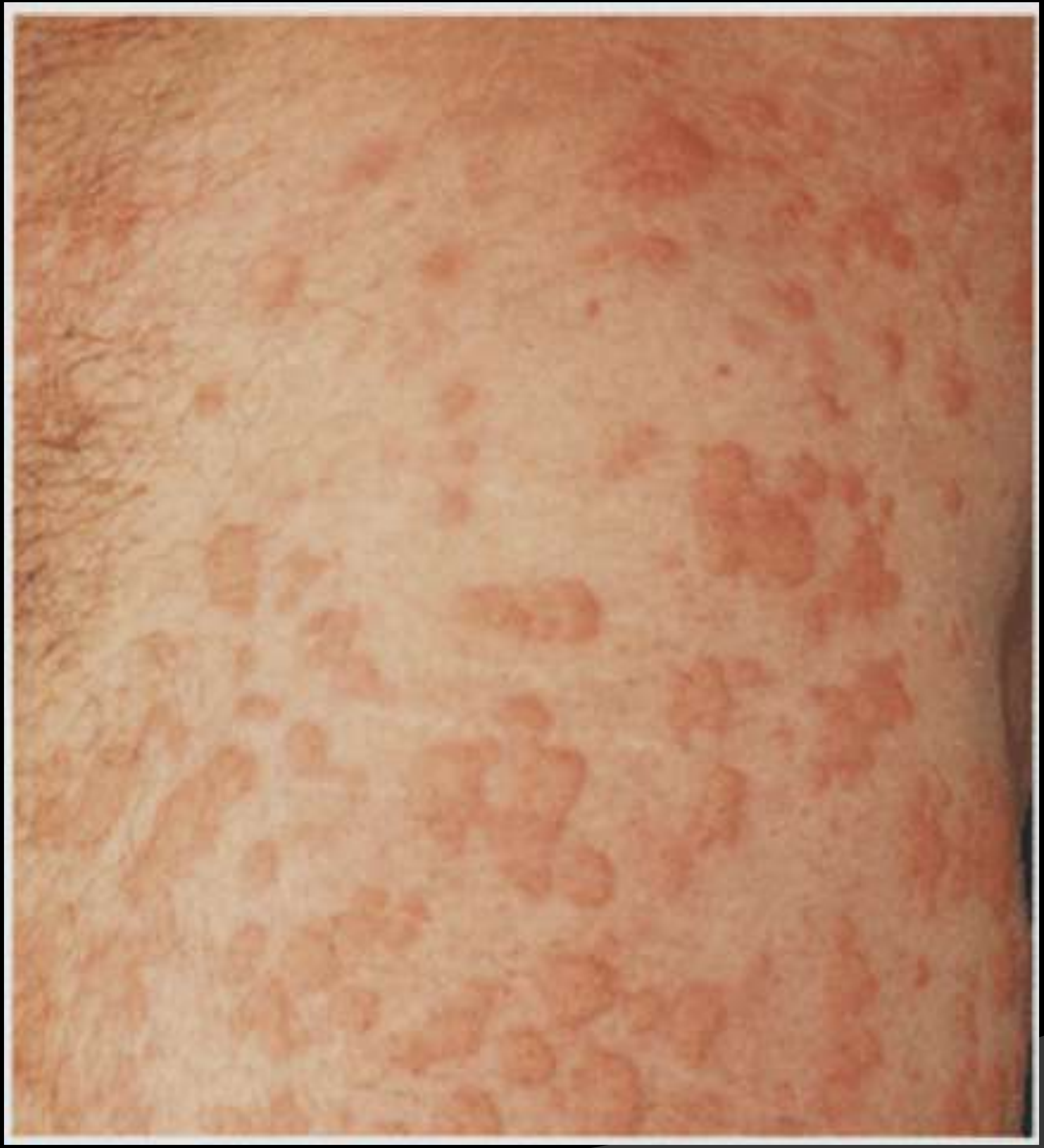


Bell palsy

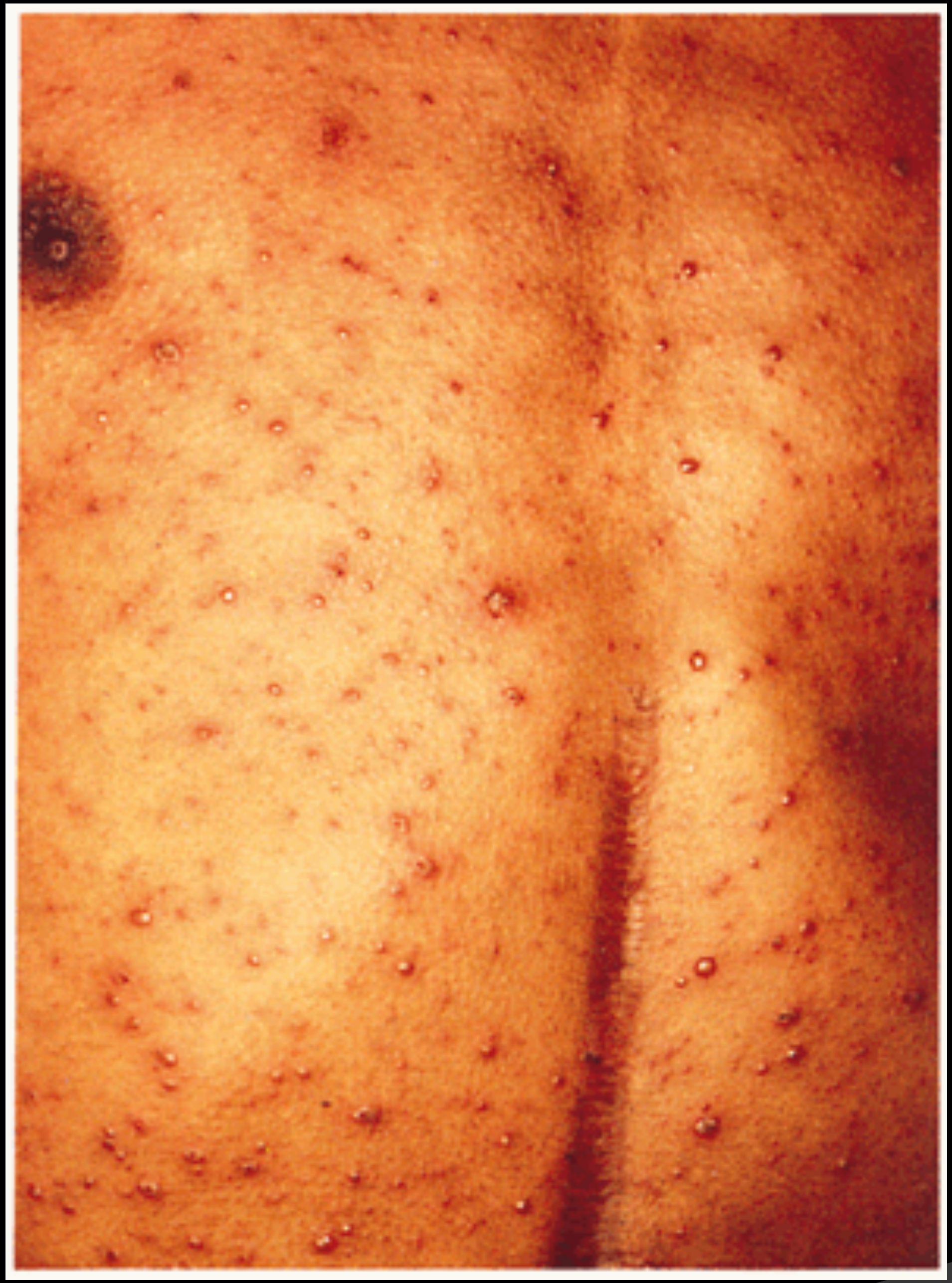
Left eye < close
open

Urticaria

[drug allergy, physical urticaria, hereditary urticaria and vasculitis]

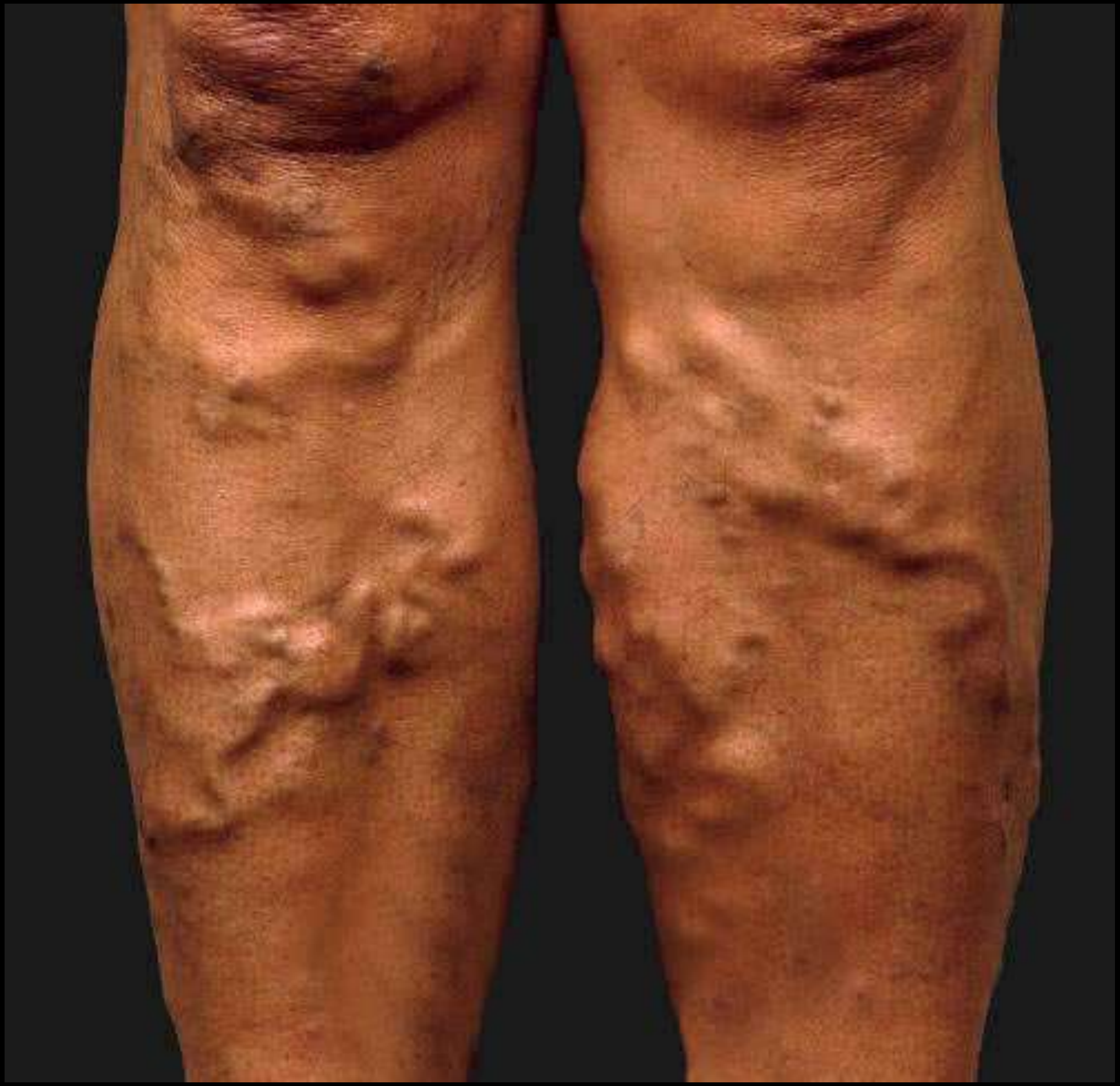


vesicular eruption of variable stages [Varicella (chicken pox)]

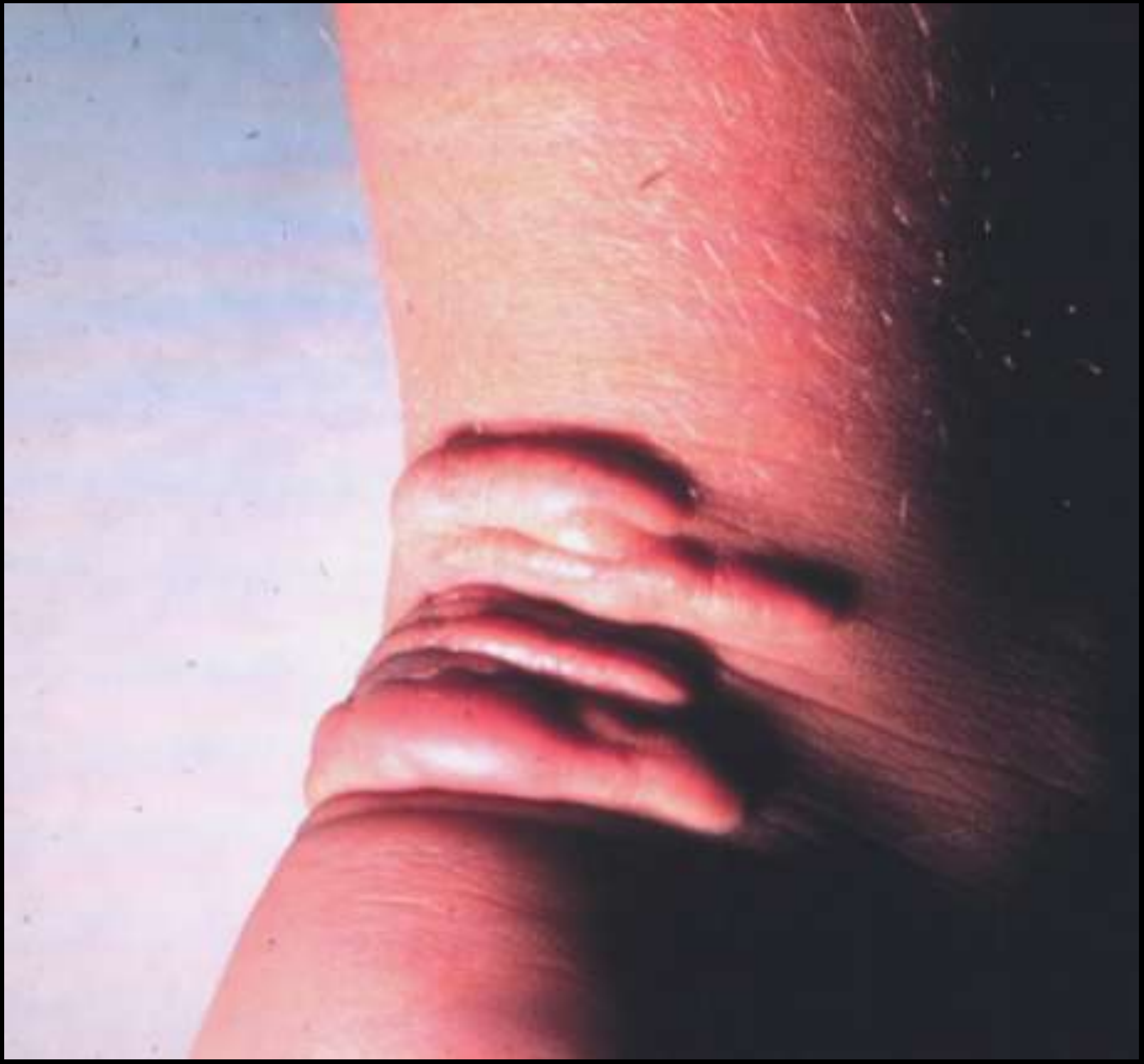


Varicose veins

[primary or secondary to deep venous insufficiency]

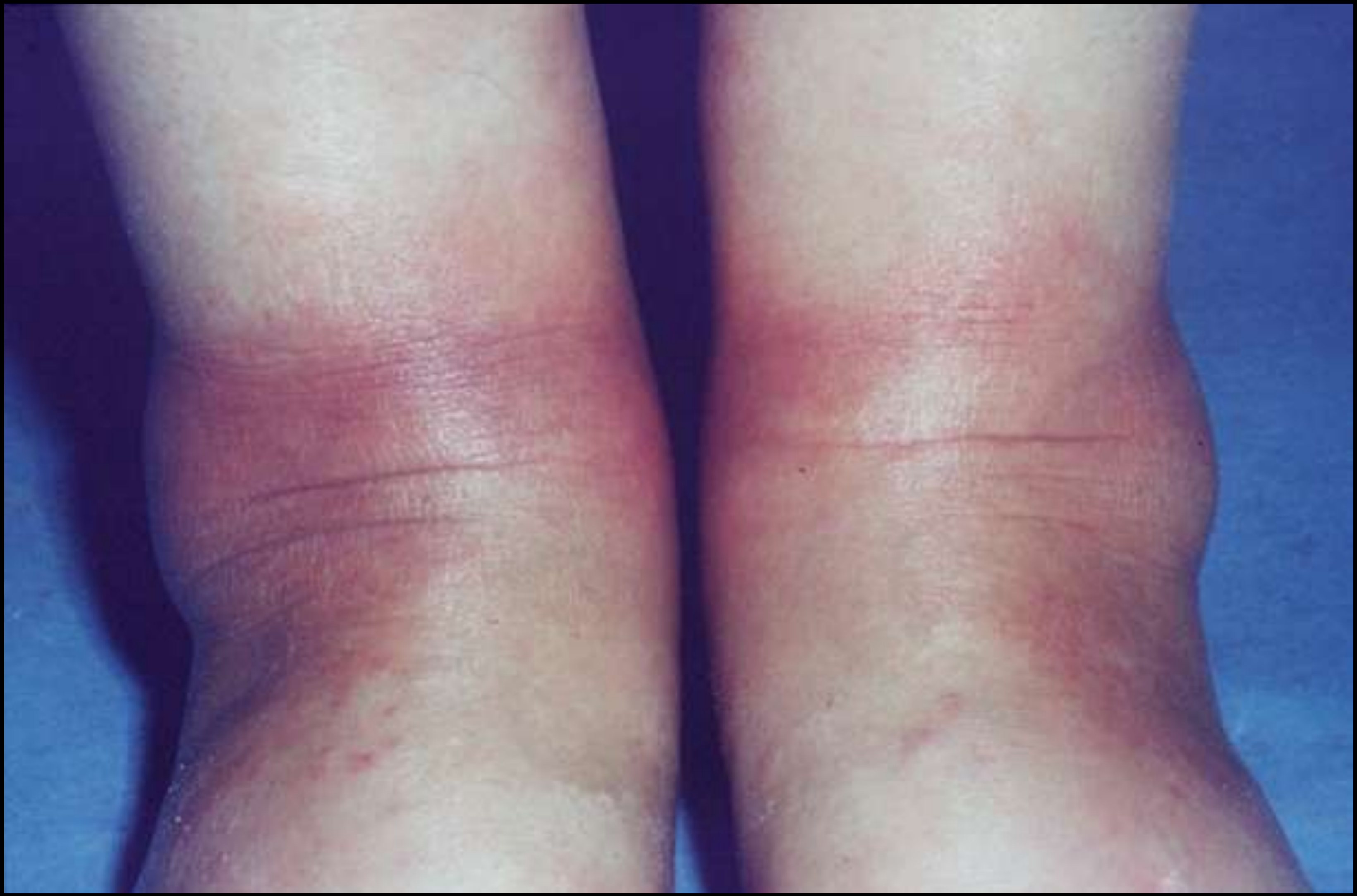


Achilles tendon xanthoma [familial hypercholesterolemia]

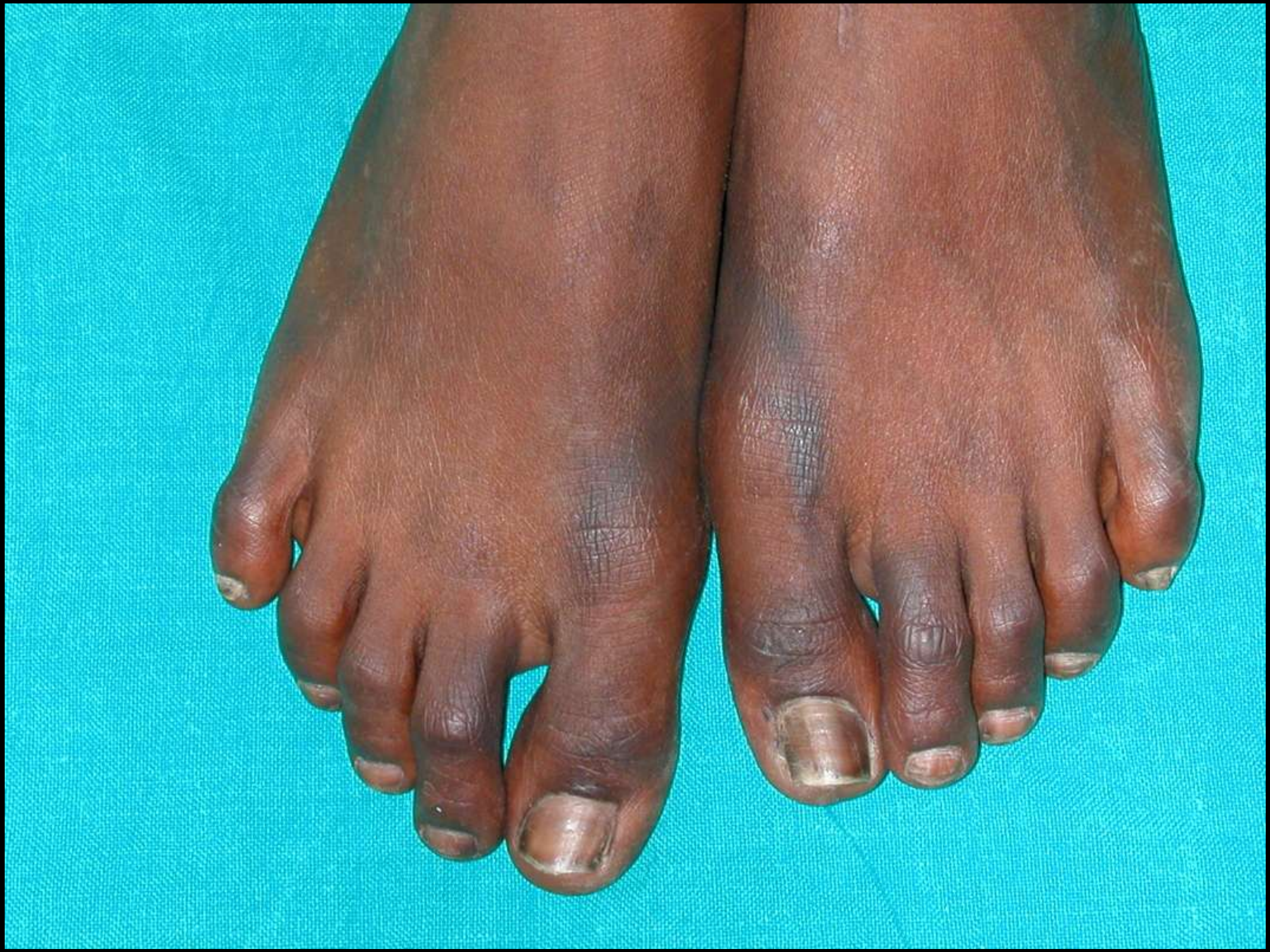


Bilateral leg edema

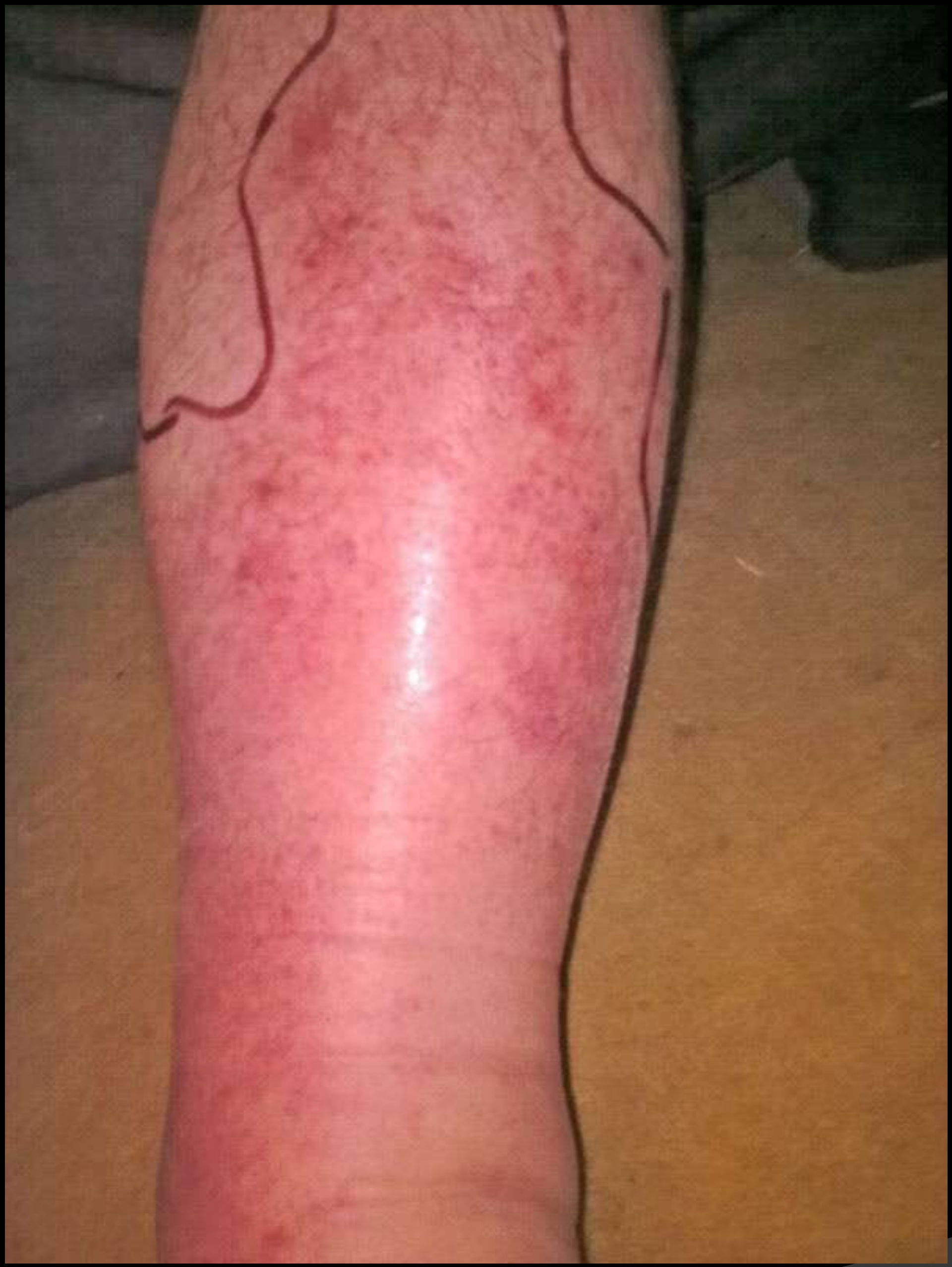
[heart failure, nephrotic syndrome, liver cirrhosis]



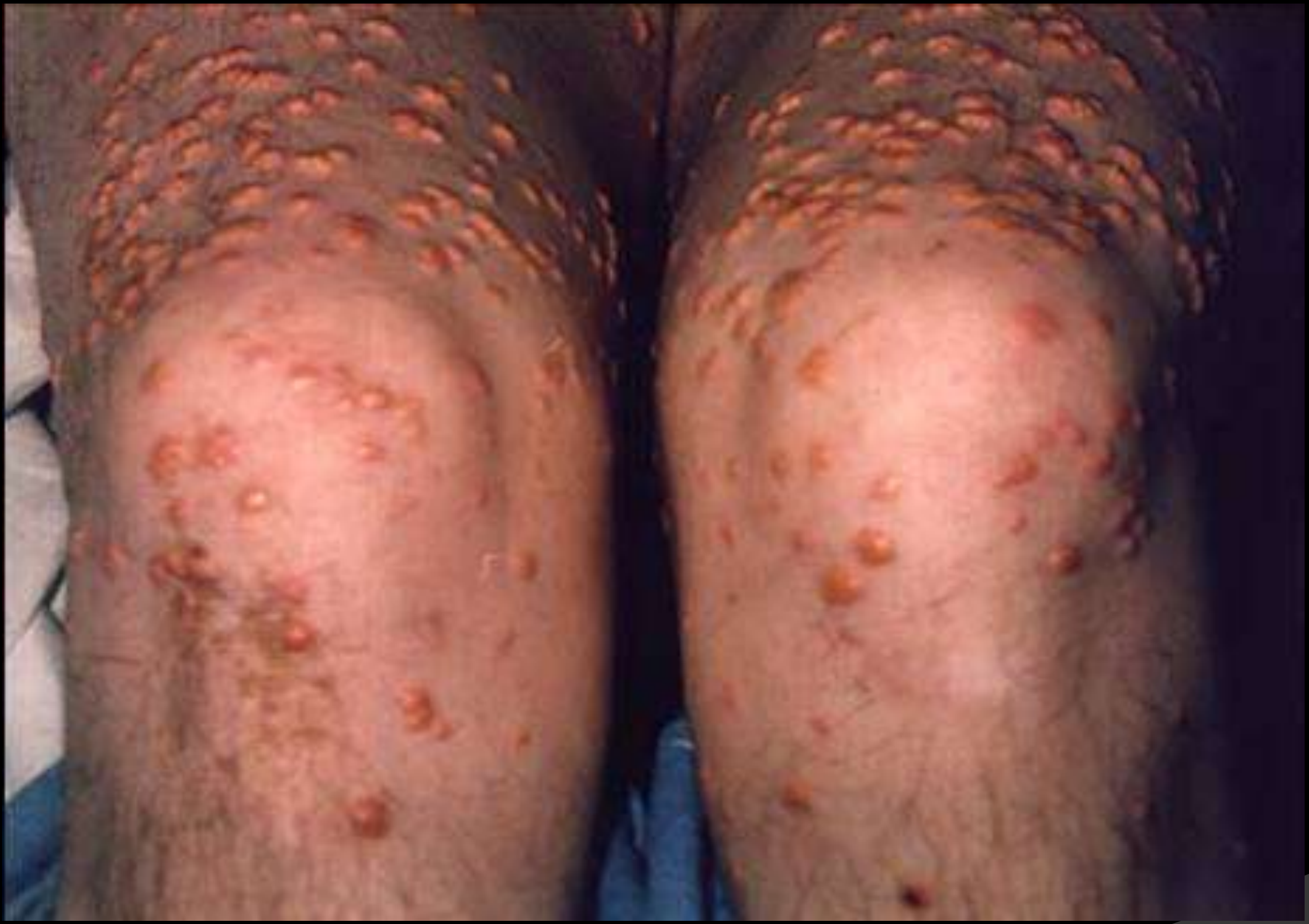
Skin hyperpigmentation [Addison's disease]



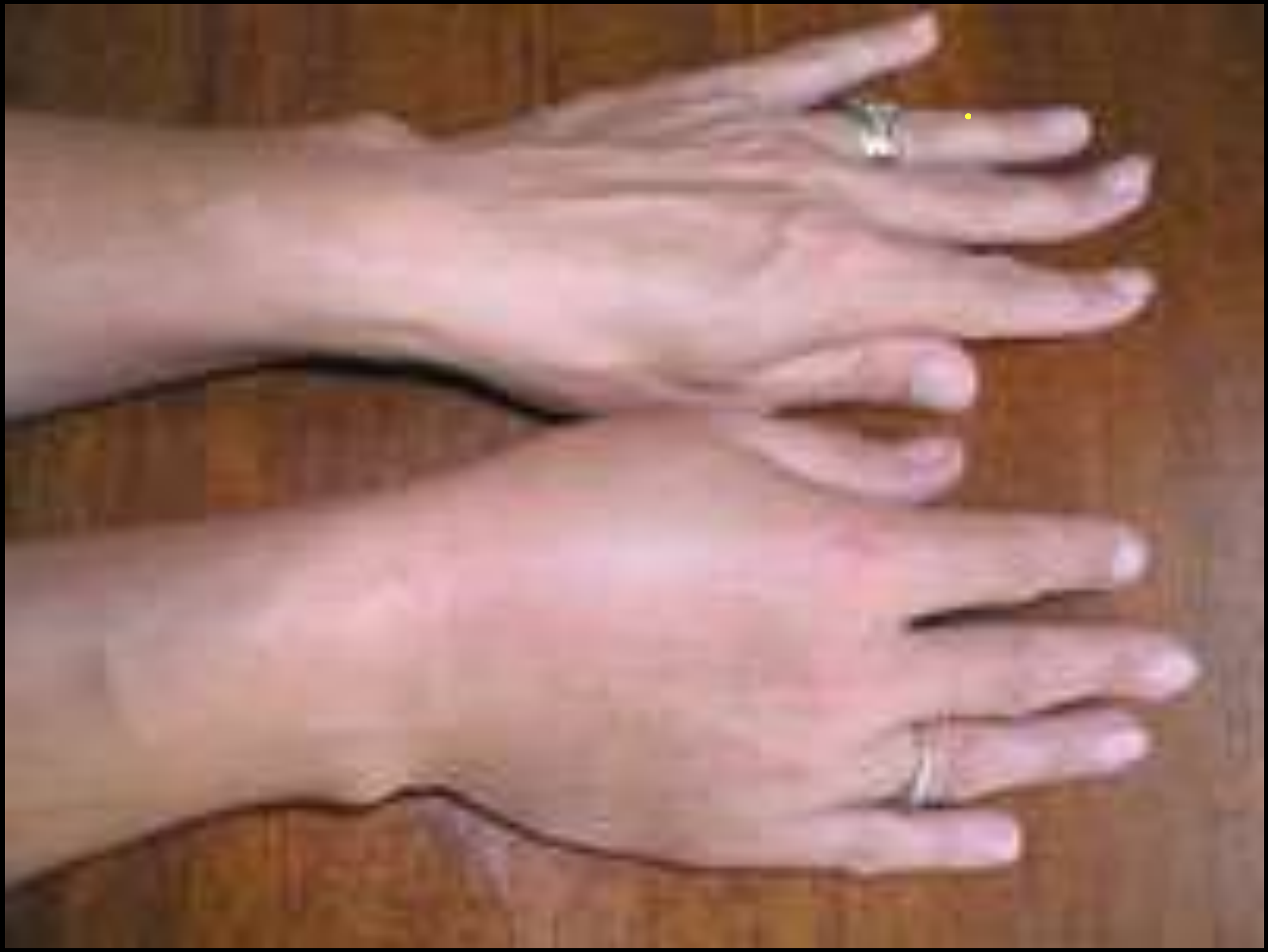
Swelling and redness of the leg [cellulitis]



Eruptive xanthoma [hypertriglyceridemia]



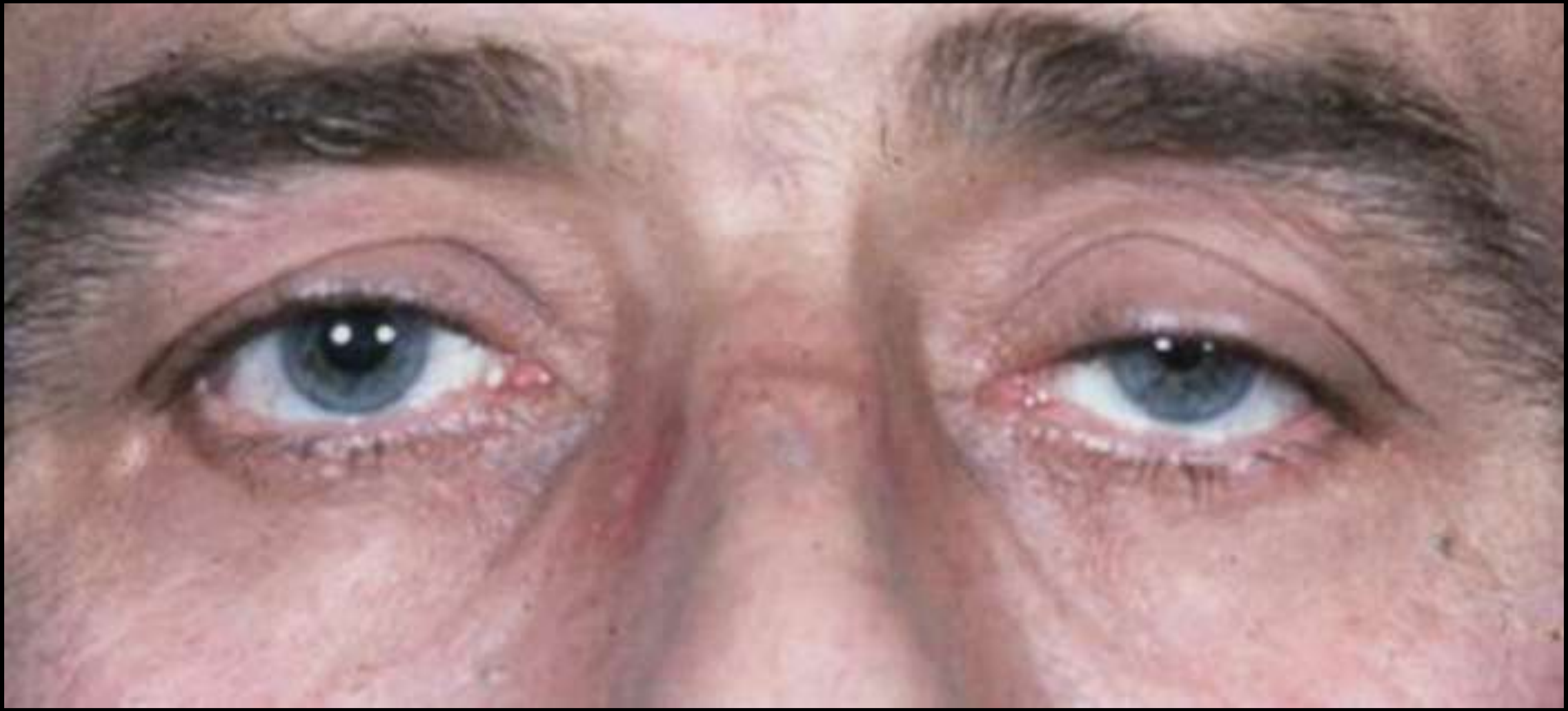
Swelling of the right hand [angioedema, hereditary or IgE dependent]



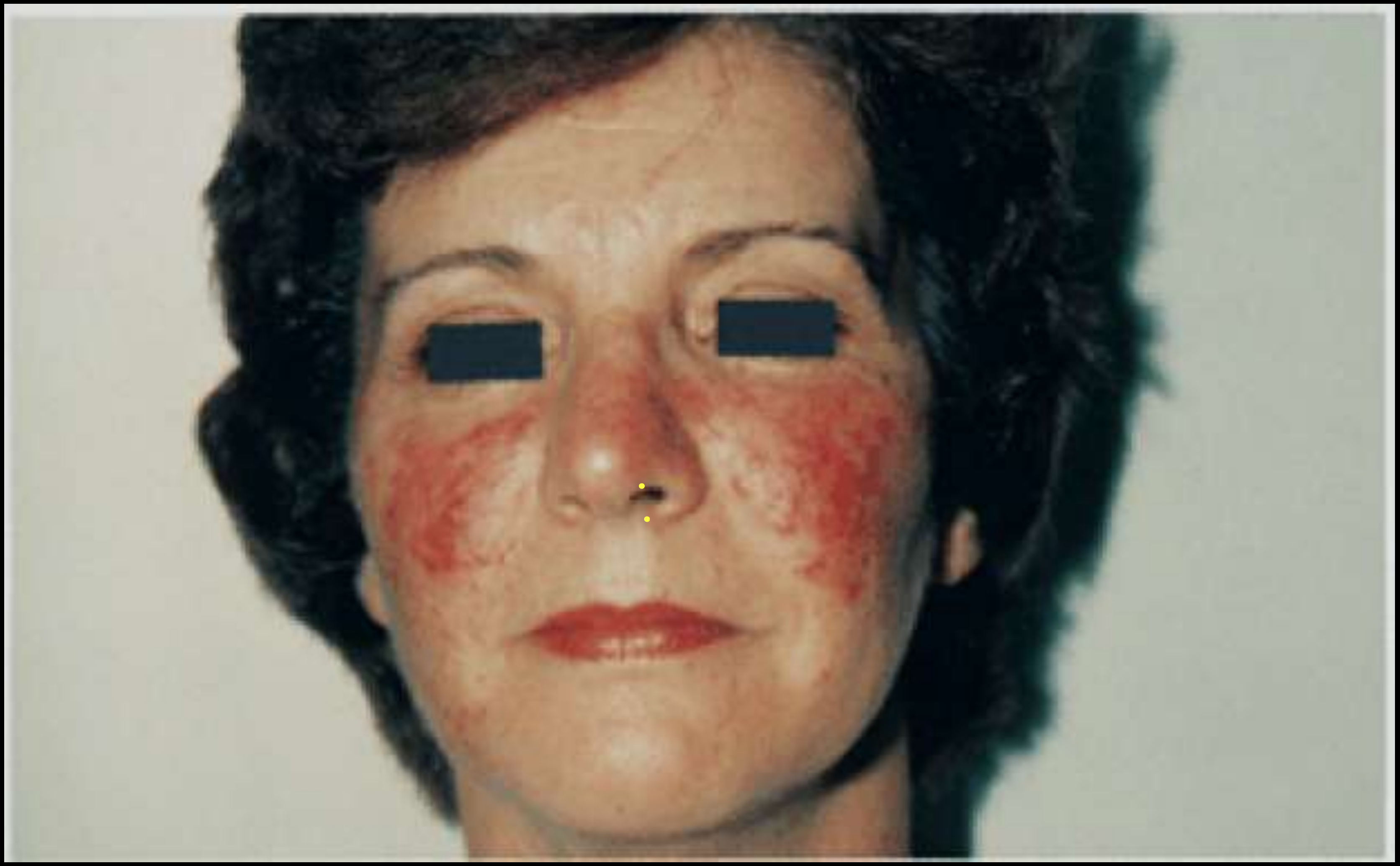
acne
Horner ✓

Enophthalmos, ptosis and meiosis [Horner's syndrome]

→ small Pupil



Papules, pustules and telangiectasia on erythematous plaque [acne rosacea]



Sara Ali

Macleod’s Box’s

General examination

Sara Ali

3.3 Information from a handshake

Features	Diagnosis
Cold, sweaty hands	Anxiety
Cold, dry hands	Raynaud's phenomenon
Hot, sweaty hands	Hyperthyroidism
Large, fleshy, sweaty hands	Acromegaly
Dry, coarse skin	Regular water exposure Manual occupation Hypothyroidism
Delayed relaxation of grip	Myotonic dystrophy
Deformed hands/fingers	Trauma Rheumatoid arthritis Dupuytren's contracture

3.4 Abnormal facial expressions

Features	Diagnosis
Poverty of expression	Parkinsonism
Startled expression	Hyperthyroidism
Apathy, with poverty of expression and poor eye contact	Depression
Apathy, with pale and puffy skin	Hypothyroidism
Lugubrious expression with bilateral ptosis	Myotonic dystrophy
Agitated expression	Anxiety Hyperthyroidism Hypomania

3.6 Types of polycythaemia

Primary

- Polycythaemia rubra vera

Secondary

- Hypoxia
  - Chronic lung disease
  - Cyanotic congenital heart disease
  - Altitude
- Excess erythropoietin
  - Adult polycystic kidney disease
  - Renal cancer
  - Ovarian cancer

3.5 Types of anaemia

Microcytic (MCV < 80 fl)

- Chronic blood loss
- Iron deficiency
- Anaemia of chronic disease
- Thalassaemia
- Sideroblastic anaemia

Macrocytic (MCV > 96 fl)

- Megaloblastic marrow due to vitamin B_{12} or folate deficiency
- Excess alcohol
- Haemolytic disorders
- Liver disease
- Hypothyroidism

Normocytic (MCV 80–96 fl)

- Acute blood loss
- Anaemia of chronic disease
- Chronic kidney disease
- Connective tissue disorders
- Marrow infiltration

MCV, mean corpuscular volume.

EBE 3.7 Central cyanosis

The minimum arterial level of deoxyhaemoglobin required to detect central cyanosis is 2.38 g/dl. The mean value for detection is 3.48 ± 0.55 g/dl.

EBE 3.9 Jaundice

Clinical detection of jaundice depends upon the level of serum bilirubin, ambient lighting and colour perception of the examining clinician: 70–80% of observers will detect jaundice if levels are 43–51 umol/L, 83% at 171 umol/L and 96% if levels are >256 umol/L.

3.8 Causes of abnormal melanin production

Condition	Mechanism
Underproduction	
Vitiligo (patchy depigmentation)	Autoimmune destruction of melanocytes
Albinism	Genetic deficiency of tyrosinase
Hypopituitarism	Reduced pituitary secretion of melanotrophic peptides, growth hormone and sex steroids
Overproduction	
Adrenal insufficiency (Addison's disease)	Increased pituitary secretion of melanotrophic peptides
Nelson's syndrome (may occur after bilateral adrenalectomy for Cushing's disease)	Increased pituitary secretion of melanotrophic peptides
Cushing's syndrome due to ectopic adrenocorticotrophic hormone secretion by tumours, e.g. small cell lung cancer	Ectopic release of melanotrophic peptides by dysregulated tumour cells
Pregnancy and oral contraceptives	Increased levels of sex hormones
Haemochromatosis	Iron deposition and stimulation of melanocytes

3.10 Causes of clubbing

Congenital or familial (5–10%)

Acquired

Thoracic (~70%)
Lung cancer
Chronic suppurative conditions
  Bronchiectasis
  Lung abscess
  Empyema
  Cystic fibrosis
Mesothelioma
Fibroma
Pulmonary fibrosis

Cardiovascular
Cyanotic congenital heart disease
Infective endocarditis
Arteriovenous shunts and aneurysms

Gastrointestinal
Cirrhosis
Inflammatory bowel disease
Coeliac disease

Others
Thyrotoxicosis (thyroid acropatchy)

3.11 Features to note in any lump or swelling (SPACESPIT)

- Size
- Position
- Attachments
- Consistency
- Edge
- Surface and shape
- Pulsation, thrills and bruits
- Inflammation
  - Redness
  - Tenderness
  - Warmth
- Transillumination

3.12 Important common causes of lymphadenopathy

Generalised

- Viral: Epstein–Barr virus (glandular fever or Burkitt's lymphoma), cytomegalovirus, human immunodeficiency virus
- Bacterial: brucellosis, syphilis
- Protozoal: toxoplasmosis
- Malignancy: lymphoma, acute or chronic lymphocytic leukaemia
- Inflammatory: rheumatoid arthritis, systemic lupus erythematosus, sarcoidosis

Localised

- Infective: acute or chronic, bacterial or viral
- Malignancy: lymphoma

حسب القديمه

3.13 The relationship between body mass index (BMI), nutritional status and ethnic group

	BMI non-Asian	BMI Asian
Severe malnutrition	<16	<16
Underweight	<18.5	<18.5
Normal	18.5–24.9	18.5–22.9
Overweight	25–29.9	23–24.9
Obese	30–39.9	25–29.9
Morbidly obese	≥40	≥30

حسب الطبعه الجديده
اكو فرق بسيط

3.0 The relationship between body mass index (BMI), nutritional status and ethnic group

Nutritional status	BMI non-Asian	BMI Asian
Underweight	<18.5	<18.5
Normal	18.5–24.9	18.5–22.9
Overweight	25–29.9	23–24.9
Obese	30–39.9	25–29.9
Morbidly obese	≥40	≥30

3.16 Causes of oedema

Low plasma oncotic pressure

Low serum albumin due to:

- Increased loss – nephrotic syndrome
- Decreased synthesis – chronic liver disease
- Malabsorption – protein-losing enteropathy, e.g. Crohn's disease and coeliac disease
- Malnutrition – kwashiorkor

Increased hydrostatic pressure

High venous pressure/obstruction due to:

- Deep vein thrombosis
- Venous insufficiency
- Pregnancy
- Pelvic tumour
- Heart failure
- Intravascular volume expansion, e.g. excess intravenous fluid, renal failure

Increased capillary permeability

- Local – soft-tissue infection/inflammation
- Systemic – severe septicaemia
- Drugs, e.g. calcium channel blockers
- Acute allergy

Lymphatic obstruction (lymphoedema) – non-pitting

- Malignant infiltration
- Congenital abnormality – Milroy's disease
- Radiation injury
- Elephantiasis – tropical (filarial) worm infestation

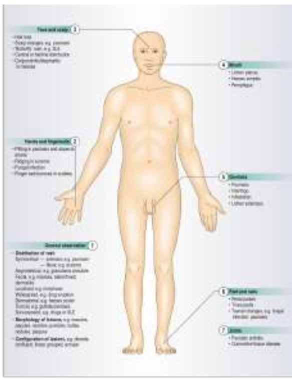
3.17 Features suggesting different causes of oedema

Heart failure	Hypoproteinaemia	DVT or ruptured Baker's cyst*	Lymphoedema	Fat
Pitting	Pitting	Pitting	Non-pitting	Non-pitting
JVP raised	JVP not raised	Warm	Not worse at the end of the day	Spares the feet
Gallop rhythm (third heart sound)		Calf tenderness		Patient obese

*On examination is not possible to distinguish a deep venous thrombosis (DVT) from a ruptured Baker's cyst.
JVP, jugular venous pressure.

3.18 Clinical features of hypothermia

Core temperature	Clinical features
36°C	Increased metabolic rate, vasoconstriction
35°C (hypothermia)	Shivering maximal, impaired judgement
34°C	Uncooperative
33°C	Depressed conscious level
28–32°C (severe hypothermia)	Progressive depression of conscious level, muscle stiffness Failure of vasoconstrictor response and shivering Bradycardia, hypotension, J waves present on electrocardiogram, risk of arrhythmias
28°C	Coma, patient may appear dead, absent pupillary and tendon reflexes Spontaneous ventricular fibrillation
20°C	Asystole/profound bradyarrhythmias



4.1 Functions of skin

Barrier

- Against chemicals, particles, microbes, ultraviolet radiation
- Against mechanical injury
- Against loss of body fluids

Homeostasis

- Regulation of body temperature

Sensation

- Touch
- Temperature
- Pressure
- Pain

Mobility

- Provides a surface for grip

Metabolism

- Role in vitamin D production

Immunity

- Outpost for immune surveillance

Psychology

- Sexual attraction
- Self-image

4.2 Causes of severe pruritus

Condition	Look for:
Scabies	Burrows on hands or feet
Dermatitis herpetiformis	Small blisters on extensor sites
Urticaria	Intermittent wheals on limbs or trunk
Eczema	Scaly, crusted, excoriated or lichenified patches
Insect bites	Linear or grouped patterns of recent onset
Lichen planus	Typical purplish papules on wrists
Generalised itch	If no rash, check blood tests for renal, haematological or hepatic diseases

4.3 Some examples of skin lesions and systemic disease

Skin lesions	Associations	Ask about
Erythema nodosum	Sarcoidosis, tuberculosis, poststreptococcal infection, connective tissue diseases, drugs	Cough and sputum, breathlessness, sore throat, drugs
Pyoderma gangrenosum	Ulcerative colitis, rheumatoid arthritis, leukaemia	Rectal bleeding, joint symptoms
Dermatitis herpetiformis	Gluten enteropathy	Family history, change in bowel habit
Generalised purpura	Idiopathic thrombocytopenic purpura and other haematological disorders	Family history, haematuria, fever and weight loss
Dermatitis artefacta	Personality disorders	Stresses or anxieties

4.4 Terms used to describe skin lesions

Term	Definition	Term	Definition
Abscess	A localised collection of pus	**Milium**	A small white cyst that contains keratin
Atrophy	Loss of epidermis, dermis or both, thin, translucent and wrinkled skin, visible blood vessels	**Nodule**	A solid elevation of skin >5 mm in diameter
Bulla	A fluid-filled blister >5 mm in diameter	**Papilloma**	A nipple-like projection from the surface of the skin
Burrow	A tunnel in epidermis caused by a parasite, e.g. Acarus in scabies	**Papule**	A solid elevation of skin <5 mm in diameter
Callus	Local hyperplasia of horny layer on palm or sole, due to pressure	**Petechia**	A haemorrhagic punctate spot 1–2 mm in diameter
Comedo	A plug of sebum and keratin wedged in a dilated pilosebaceous orifice on the face	**Plaque**	A palpable elevation of skin >2 cm diameter and <5 mm in height
Crust	Dried exudate, e.g. serum, blood or pus, on the skin surface	**Purpura**	Extravasation of blood resulting in redness of skin or mucous membranes
Cyst	A nodule consisting of an epithelial-lined cavity filled with fluid or semisolid material	**Pustule**	A visible collection of pus in a blister
Ecchymosis	A macular red or purple haemorrhage, >2 mm in diameter, in skin or mucous membrane	**Scale**	Accumulation of easily detached fragments of thickened keratin
Erosion	A superficial break in the epidermis, not extending into dermis, heals without scarring	**Scar**	Replacement of normal tissue by fibrous connective tissue at the site of an injury
Erythema	Redness of the skin due to vascular dilatation	**Stria**	Atrophic linear band in skin, white, pink or purple, from connective tissue changes
Excoriation	A superficial abrasion, often linear, due to scratching	**Telangiectasia**	Dilated dermal blood vessels resulting in a visible lesion
Fissure	A linear split in epidermis, often just extending into dermis	**Ulcer**	A circumscribed area of skin loss extending into the dermis
Freckle	A macular area showing increased pigment formation by melanocytes	**Vesicle**	A clear, fluid-filled blister <5 mm in diameter
Lichenification	Chronic thickening of skin with increased skin markings, from rubbing or scratching	**Wheal**	A transitory, compressible papule or plaque of dermal oedema, red or white, indicating urticaria
Macule	A localised area of colour or textural change in the skin		

4.5 Causes of hirsutism

Type	Example
Pituitary	Acromegaly
Adrenal	Cushing's syndrome, virilising tumours, congenital adrenal hyperplasia
Ovarian	Polycystic ovary syndrome, virilising tumours
Drugs	Androgens, progestogens
Idiopathic	End-organ hypersensitivity to androgens

4.7 Causes of hypoalbuminaemia and leukonychia

Reduced albumin synthesis

- Chronic liver disease

Urinary protein loss

- Nephrotic syndrome

Protein-losing enteropathy

- Crohn's disease
- Ulcerative colitis
- Ménétrier's disease of the stomach
- Coeliac disease
- Intestinal lymphoma
- Bacterial overgrowth
- Radiation damage

Protein malnutrition

- Kwashiorkor

4.6 Nail changes in systemic disease and skin disorders

حسب الطبعه القديمه

Change	Description of nail	Differential diagnosis
Beau's lines	Transverse grooves	Any severe systemic illness which affects growth of the nail matrix
Brittle nails	Nails break easily, usually at distal margin	Effect of water and detergent, iron deficiency, hypothyroidism, digital ischaemia
Clubbing	Loss of angle between nail fold and nail plate. Finger tip bulbous. Nail matrix feels spongy	Familial or may signify serious cardiac or respiratory disease
Colour changes	Blue Blue-green Brown Brown longitudinal streak	Cyanosis, antimalarials, haematoma *Pseudomonas* infection Fungal infection, staining from cigarettes, chlorpromazine, gold, Addison's disease Melanocytic naevus, malignant melanoma, Addison's disease, racial variant

4.6 Nail changes in systemic disease and skin disorders – *cont'd*

Change	Description of nail	Differential diagnosis
	Red streaks (splinter haemorrhages) White spots White/brown 'half and half' nails White (leukonychia) Yellow Yellow nail syndrome	Infective endocarditis, trauma Trauma to nail matrix (not calcium deficiency) Chronic kidney disease Hypoalbuminaemia, e.g. associated with cirrhosis Psoriasis, fungal infection, jaundice, tetracycline Defective lymphatic drainage – pleural effusions may occur
Combination changes	Longitudinal ridges and triangular nicks at the distal nail	Darier's disease
Koilonychia	Spoon-shaped depression of nail plate	Iron deficiency anaemia, lichen planus, repeated exposure to detergents
Nail fold erythema and telangiectasia	Dilated capillaries and erythema at nail fold	Connective tissue disorders, including systemic sclerosis, SLE, dermatomyositis
Onycholysis	Nail separates from nail bed	Psoriasis, fungal infection, trauma, thyrotoxicosis, tetracyclines (photo-onycholysis)
Onychomycosis	Thickening of the nail plate with colour change, usually whitening or brown discoloration	Fungal infection
Pitting Thimble pitting Coarse pitting	Fine or coarse pits in the nail A particular type of fine regular pitting, as seen on a thimble Larger irregular pits in the nail plate	Psoriasis, eczema, alopecia areata, lichen planus Alopecia areata Eczema
Ridging	Transverse (across nail) Longitudinal (up/down)	Beau's lines (see above), eczema, psoriasis, tic dystrophy, chronic paronychia Lichen planus, Darier's disease
Splinter haemorrhages	Small red streaks that lie longitudinally in the nail plate	Trauma, but can signify infective endocarditis

3.3 The nails in systemic disease

حسب الطبعه الجديده
اكو شويه اضافات جديده

Nail changes	Description of nail	Differential diagnosis
Beau's lines	Transverse grooves (Fig. 3.7B)	Sequela of any severe systemic illness that affects growth of the nail matrix
Clubbing	Loss of angle between nail fold and nail plate (Fig. 3.8)	Serious cardiac, respiratory or gastrointestinal disease (Box 3.4)
Leuconychia	White spots, ridges or complete discoloration of nail (Fig. 3.7C)	Trauma, infection, poisoning, chemotherapy, vitamin deficiency
Lindsay's nails	White/brown 'half-and-half' nails (see Fig. 12.7, p. 278)	Chronic kidney disease
Koilonychia	Spoon-shaped depression of nail plate (Fig. 3.7D)	Iron deficiency anaemia, lichen planus, repeated exposure to detergents
Muehrcke's lines	Narrow, white transverse lines (see Fig. 12.6, p. 278)	Decreased protein synthesis or protein loss
Nail-fold telangiectasia	Dilated capillaries and erythema at nail fold (see 14.17B, p. 335)	Connective tissue disorders, including systemic sclerosis, systemic lupus erythematosus, dermatomyositis
Onycholysis	Nail separates from nail bed (Fig. 3.7A)	Psoriasis, fungal infection, trauma, thyrotoxicosis, tetracyclines (photo-onycholysis)
Onychomycosis	Thickening of nail plate with white, yellow or brown discoloration	Fungal infection
Pitting	Fine or coarse pits in nail (Fig. 3.7A)	Psoriasis (onycholysis, thickening and ridging may also be present), eczema, alopecia areata, lichen planus
Splinter haemorrhages	Small red streaks that lie longitudinally in nail plate (Fig. 4.5B, p. 51)	Trauma, infective endocarditis
Yellow nails	Yellow discoloration and thickening (Fig. 14.18, p. 336)	Yellow nail syndrome

Telegram @UOWABot

موجود بالطبعه الجديده

3.5 Conditions associated with facial flushing

Physiological

- Fever
- Exercise
- Heat exposure
- Emotional

Drugs (e.g. glyceryl trinitrate, calcium channel blockers, nicotinic acid)

Anaphylaxis

Endocrine

- Menopause
- Androgen deficiency (in men)
- Carcinoid syndrome
- Medullary thyroid cancer

Others

- Serotonin syndrome
- Food/alcohol ingestion
- Neurological (e.g. Frey's syndrome)
- Rosacea
- Mastocytoses

3.15 Drugs associated with weight gain

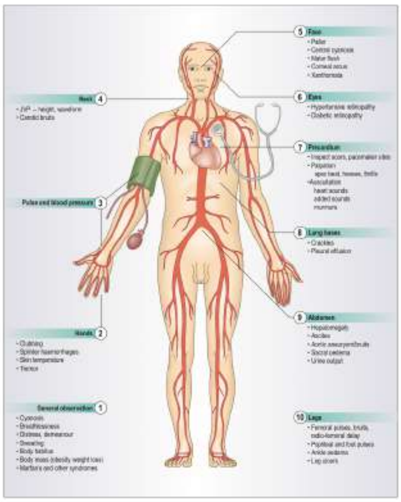
Class	Examples
Anticonvulsants	Sodium valproate, phenytoin, gabapentin
Antidepressants	Citalopram, mirtazapine
Antipsychotics	Chlorpromazine, risperidone, olanzapine, lithium
Beta-blockers	Atenolol
Oral corticosteroids	Prednisolone, dexamethasone
Migraine prophylaxis	Pizotifen
Sulphonylureas/ hypoglycaemic agents	Gliclazide, pioglitazone
Insulin	All formulations
Protease inhibitors for HIV infection	Indinavir, ritonavir, lopinavir

موجود بالطبعه
الجديده

3.7 Conditions with characteristic facial appearances

Diagnosis	Facial features
Hypothyroidism (Fig. 10.5, p. 224)	Sparse, coarse hair and eyebrows; periorbital puffiness; dry, waxy skin; apathetic expression; macroglossia
Graves disease (autoimmune thyrotoxicosis) (Fig. 10.2A, p. 221)	Staring appearance due to lid retraction, proptosis, evidence of weight loss
Hypopituitarism	Pale, often unwrinkled skin with loss of hair
Acromegaly (Fig. 10.8A, p. 228)	Thickened, coarse skin with enlarged nose and frontal bones, prognathism (lower jaw protrusion), widely spaced teeth, macroglossia
Cushing's syndrome (Fig. 10.10A, p. 230)	Moon-shaped plethoric facies
Osteogenesis imperfecta (Fig. 3.30A)	Blue sclerae
Hereditary haemorrhagic telangiectasia (Fig. 3.30B)	Telangiectasia on and around lips
Systemic sclerosis (Fig. 3.30C)	Tight skin constricting mouth, 'beaking' of nose, loss of nasolabial folds
Myotonic dystrophy (Fig. 3.30D)	Frontal balding, paucity of expression, bilateral ptosis
Down's syndrome (Fig. 3.31)	Flat facial profile, up-slanting palpebral fissures, small, low-set ears, macroglossia, Brushfield spots in iris
Systemic lupus erythematosus	'Butterfly' erythematous rash on cheeks

Cardio vascular system



6.1 Common symptoms of heart disease

Symptom	Cardiovascular causes	Other causes
Chest discomfort	Myocardial infarction Angina Pericarditis Aortic dissection	Oesophageal spasm Pneumothorax Musculoskeletal pain
Breathlessness	Heart failure Angina Pulmonary embolism Pulmonary hypertension	Respiratory disease Anaemia Obesity Anxiety
Palpitation	Tachyarrhythmias Ectopic beats	Anxiety Hyperthyroidism Drugs
Syncope/ dizziness	Arrhythmias Postural hypotension Aortic stenosis Hypertrophic cardiomyopathy Atrial myxoma	Simple faints Epilepsy Anxiety
Oedema	Heart failure Constrictive pericarditis Venous stasis Lymphoedema	Nephrotic syndrome Liver disease Drugs Immobility

6.2 Cardiovascular causes of chest pain and their characteristics

	Angina	Myocardial infarction	Aortic dissection	Pericardial pain	Oesophageal pain
Site	Retrosternal	Retrosternal	Interscapular/ retrosternal	Retrosternal or left-sided	Retrosternal or epigastric
Onset	Over 1–2 minutes	Rapid over a few minutes	Very sudden	Gradual, postural change may suddenly aggravate	Over 1–2 minutes; can be sudden (spasm)
Character	Constricting, heavy	Constricting, heavy	Tearing or ripping	Sharp, 'stabbing', pleuritic	Gripping, tight or burning
Radiation	Sometimes arm(s), neck, epigastrium	Often to arm(s), neck, jaw, sometimes epigastrium	Back, between shoulders	Left shoulder or back	Often to back, sometimes to arms
Associated features	Breathlessness	Sweating, nausea, vomiting, breathlessness, feeling of impending death (angor animi)	Sweating, syncope, focal neurological signs, signs of limb ischaemia, mesenteric ischaemia	Flu-like prodrome, breathlessness, fever	Heartburn, acid reflux
Timing	2–10 minutes	Prolonged	Prolonged	Gradual onset, variable duration	Nighttime common, variable duration
Exacerbating/ relieving factors	Triggered by emotion, exertion, especially if cold, windy. Relieved by rest, nitrates	'Stress' and exercise rare triggers, usually spontaneous. Not relieved by rest or nitrates	Spontaneous No manoeuvres relieve pain	Pleuritic Sitting up/lying down may affect intensity Non-steroidal anti-inflammatory drugs (NSAIDs) help	Lying flat some foods may trigger Not relieved by rest; nitrates sometimes relieve
Severity	Mild to moderate	Usually severe	Very severe	Can be severe	Usually mild but oesophageal spasm can mimic myocardial infarction
Cause	Coronary artery disease, aortic stenosis, hypertrophic cardiomyopathy	Plaque rupture and coronary artery occlusion	Thoracic aortic dissection rupture	Pericarditis (usually viral, also post myocardial infarction)	Oesophageal spasm, reflux, hiatus hernia

6.3 Canadian Cardiovascular Society: functional classification of stable angina

Grade 1	Ordinary physical activity, such as walking and climbing stairs, does not cause angina. Angina with strenuous or rapid or prolonged exertion at work or recreation
Grade 2	Slight limitation of ordinary activity. Walking or climbing stairs rapidly, walking uphill, walking or stair climbing after meals, in cold, in wind, or when under emotional stress, or only during the few hours after awakening
Grade 3	Marked limitation of ordinary physical activity. Walking 1–2 blocks on the level and climbing less than one flight in normal conditions
Grade 4	Inability to carry on any physical activity without discomfort; angina may be present at rest

6.5 New York Heart Association classification of heart failure symptom severity

Class I	No limitations. Ordinary physical activity does not cause undue fatigue, dyspnoea or palpitation (asymptomatic left ventricular dysfunction)
Class II	Slight limitation of physical activity. Such patients are comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnoea or angina pectoris (symptomatically 'mild' heart failure)
Class III	Marked limitation of physical activity. Less than ordinary physical activity will lead to symptoms (symptomatically 'moderate' heart failure)
Class IV	Symptoms of congestive heart failure are present, even at rest. With any physical activity increased discomfort is experienced (symptomatically 'severe' heart failure)

6.4 Some mechanisms and causes of heart failure

Mechanism	Cause
Reduced ventricular contractility (systolic dysfunction)	Myocardial ischaemia Myocardial infarction Cardiomyopathy Myocarditis Drugs with negative inotropic actions, e.g. beta-blockers
Impaired ventricular filling (diastolic dysfunction)	Left ventricular hypertrophy Constrictive pericarditis
Increased metabolic and cardiac demand	Pregnancy* Anaemia* Fever* Thyrotoxicosis Arteriovenous fistulae Paget's disease
Arrhythmia	Tachycardia, especially atrial fibrillation Bradycardia
Valvular or structural cardiac lesions	Mitral and/or aortic valve disease Tricuspid and/or pulmonary valve disease (rare) Ventricular septal defect Hypertrophic cardiomyopathy
Fluid overload	Excessive intravenous infusion Drugs, e.g. non-steroidal anti-inflammatory drugs, steroids
Other	Intercurrent non-cardiac illness in patients with cardiac disease

*Aggravating factors which rarely cause heart failure alone.

6.6 Descriptions of arrhythmias

	Extrasystoles	Sinus tachycardia	Supraventricular tachycardia	Atrial fibrillation	Ventricular tachycardia
Site	–	–	–	–	–
Onset	Sudden	Gradual	Sudden, with 'jump'	Sudden	Sudden
Character	'Jump', missed beat or flutter	Regular, fast	Regular, fast	Irregular, usually fast; slower in elderly	Regular, fast
Radiation	–	–	–	–	–
Associated features	Nil	Anxiety	Polyuria, lightheadedness, chest tightness	Polyuria, breathlessness. Syncope uncommon	Presyncope, syncope, chest tightness
Timing	Brief	A few minutes	Minutes to hours	Variable	Variable
Exacerbating/ relieving factors	Fatigue, caffeine, alcohol may trigger. Often relieved by walking (increases sinus rate)	Exercise or anxiety may trigger	Usually at rest, trivial movements, e.g. bending, may trigger. Vagal manoeuvres may relieve	Exercise or alcohol may trigger; often spontaneous	Exercise may trigger; often spontaneous
Severity	Mild (usually)	Mild to moderate	Moderate to severe	Very variable, may be asymptomatic	Often severe

Causes of parxysmal
nocturnal
dyspnea

Causes
- Ischaemic heart disease
- Aortic valve disease
- Hypertension
- Cardiomyopathy
- Atrial fibrillation
- Mitral valve disease
- Atrial tumours

6.10 Genetically determined cardiovascular disorders

Single-gene defects

Hypertrophic cardiomyopathy	Muscular dystrophies
Marfan's syndrome	Long Q–T syndrome
Familial hypercholesterolaemia	Arrhythmogenic right ventricular cardiomyopathy (ARVC)

Polygenic inheritance

Ischaemic heart disease	Hyperlipidaemia
Hypertension	Abdominal aortic aneurysm
Type 2 diabetes mellitus	

6.8 Causes of unilateral and bilateral leg oedema

Unilateral

- Deep vein thrombosis
- Soft-tissue infection
- Trauma
- Immobility, e.g. hemiplegia
- Lymphoedema

Bilateral

- Heart failure
- Chronic venous insufficiency
- Hypoproteinaemia, e.g. nephrotic syndrome, kwashiorkor, cirrhosis
- Lymphatic obstruction, e.g. pelvic tumour, filariasis
- Drugs, e.g. NSAIDs, nifedipine, amlodipine, fludrocortisone
- Inferior vena caval obstruction
- Thiamine (vitamin B_1) deficiency (wet beriberi)
- Milroy's disease (unexplained lymphoedema which appears at puberty; more common in females)
- Immobility

6.9 Cardiovascular disease presenting with 'non-cardiac' symptoms

System	Symptom	Cause
Central nervous system	Stroke	Cerebral embolism Endocarditis Hypertension
Gastrointestinal	Jaundice Abdominal pain	Liver congestion secondary to heart failure Mesenteric embolism
Renal	Oliguria	Heart failure

6.11 Occupational aspects of cardiovascular disease

Occupational exposure associated with cardiovascular disease

- Organic solvents: arrhythmias, cardiomyopathy
- Vibrating machine tools: Raynaud's phenomenon
- Publicans: alcohol-related cardiomyopathy

Occupational exposure exacerbating pre-existing cardiac conditions

- Cold exposure: angina, Raynaud's disease
- Deep-sea diving: embolism through foramen ovale

Occupational requirements for high standards of cardiovascular fitness

- Pilots
- Public transport/heavy goods vehicle drivers
- Armed forces
- Police

6.13 Surface markings of the arterial pulses

Artery	Surface marking
Radial	At the wrist, lateral to the flexor carpi radialis tendon
Brachial	In the antecubital fossa, medial to the biceps tendon
Carotid	At the angle of the jaw, anterior to the sternocleidomastoid muscle
Femoral	Just below the inguinal ligament, midway between the anterior superior iliac spine and the pubic symphysis (the mid inguinal point). It is immediately lateral to the femoral vein and medial to the femoral nerve
Popliteal	Lies posteriorly in relation to the knee joint, at the level of the knee crease, deep in the popliteal fossa
Posterior tibial	Located 2 cm below and posterior to the medial malleolus, where it passes beneath the flexor retinaculum between flexor digitorum longus and flexor hallucis longus
Dorsalis pedis	Passes lateral to the tendon of extensor hallucis longus and is best felt at the proximal extent of the groove between the first and second metatarsals. It may be absent or abnormally sited in 10% of normal subjects, sometimes being 'replaced' by a palpable perforating peroneal artery

6.14 Haemodynamic effects of respiration

	Inspiration	Expiration
Pulse/heart rate	Accelerates	Slows
Systolic blood pressure	Falls (up to 10 mmHg)	Rises
Jugular venous pressure	Falls	Rises
Second heart sound	Splits	Fuses

6.16 Causes of an irregular pulse

- Sinus arrhythmia
- Atrial extrasystoles
- Ventricular extrasystoles
- Atrial fibrillation
- Atrial flutter with variable response
- Second-degree heart block with variable response

6.15 Causes of a fast or slow pulse

Heart rate	Sinus rhythm	Arrhythmia
Fast (tachycardia, >100 bpm)	Exercise Pain Excitement/anxiety Fever Hyperthyroidism Medication: Sympathomimetics, e.g salbutamol Vasodilators	Atrial fibrillation Atrial flutter Supraventricular tachycardia Ventricular tachycardia
Slow (bradycardia, <60 bpm)	Sleep Athletic training Hypothyroidism Medication: Beta-blockers Digoxin Verapamil, diltiazem	Carotid sinus hypersensitivity Sick sinus syndrome Second-degree heart block Complete heart block

6.17 Common causes of atrial fibrillation

- Hypertension
- Heart failure
- Myocardial infarction
- Thyrotoxicosis
- Alcohol-related heart disease
- Mitral valve disease
- Infection, e.g. respiratory, urinary
- Following surgery, especially cardiothoracic surgery

6.18 Causes of increased pulse volume

Physiological

- Exercise
- Pregnancy
- Advanced age
- Increased environmental temperature

Pathological

- Peripheral vascular disease
- Hypertension
- Fever
- Thyrotoxicosis
- Anaemia
- Aortic regurgitation
- Paget's disease of bone
- Peripheral atrioventricular shunt

6.19 British Hypertension Society classification of blood pressure (BP) levels

BP	Systolic BP (mmHg)	Diastolic BP (mmHg)
Optimal	<120	<80
Normal	<130	<85
High normal	130–139	85–89
Hypertension		
Grade 1 (mild)	140–159	90–99
Grade 2 (moderate)	160–179	100–109
Grade 3 (severe)	>180	>110
Isolated systolic hypertension		
Grade 1	140–159	<90
Grade 2	>160	<90

6.20 Causes of secondary hypertension

Renal arterial disease, including renal artery stenosis	Suspect if there is other evidence of vascular disease
Phaeochromocytoma	Neuroendocrine tumour that secretes catecholamines, causing hypertension, headaches, sweating and palpitation
Conn's syndrome	Tumour of the adrenal cortex that secretes aldosterone
Cushing's syndrome	Microadenoma of the pituitary that secretes adrenocorticotrophic hormone (ACTH)
Coarctation of the aorta	
Adult polycystic kidney disease (p. 204)	

6.23 Differences between carotid artery and jugular venous pulsation

Carotid	Jugular
Rapid outward movement	Rapid inward movement
One peak per heart beat	Two peaks per heart beat (in sinus rhythm)
Palpable	Impalpable
Pulsation unaffected by pressure at the root of the neck	Pulsation diminished by pressure at the root of the neck
Independent of respiration	Height of pulsation varies with respiration
Independent of position of patient	Varies with position of patient
Independent of abdominal pressure	Rises with abdominal pressure

6.24 Abnormalities of the jugular venous pulse

Condition	Abnormalities
Heart failure	Elevation, sustained abdominojugular reflux >10 seconds
Pulmonary embolism	Elevation
Pericardial effusion	Elevation, prominent 'y' descent
Pericardial constriction	Elevation, Kussmaul's sign
Superior vena caval obstruction	Elevation, loss of pulsation
Atrial fibrillation	Absent 'a' waves
Tricuspid stenosis	Giant 'a' waves
Tricuspid regurgitation	Giant 'v' waves
Complete heart block	'Cannon' waves

6.25 Cardiac auscultation: the best sites for hearing abnormality

Site	Sound
Cardiac apex	First heart sound Third and fourth heart sounds Mid-diastolic murmur of mitral stenosis
Lower left sternal border	Early diastolic murmurs of aortic and tricuspid regurgitation
Upper left sternal border	Second heart sound Opening snap of mitral stenosis Pulmonary valve murmurs Pansystolic murmur of ventricular septal defect
Upper right sternal border	Systolic ejection (outflow) murmurs, e.g. aortic stenosis, hypertrophic cardiomyopathy
Left axilla	Radiation of the pansystolic murmur of mitral regurgitation
Below left clavicle	Continuous 'machinery' murmur of a persistent patent ductus arteriosus

6.26 Abnormalities of intensity of the first heart sound

Quiet

Low cardiac output
Poor left ventricular function
Rheumatic mitral regurgitation
Long P–R interval (first-degree heart block)

Loud

Increased cardiac output
Large stroke volume
Mitral stenosis
Short P–R interval
Atrial myxoma (rare)

Variable

Atrial fibrillation
Extrasystoles
Complete heart block

6.27 Abnormalities of the second heart sound

Quiet

Low cardiac output
Calcific aortic stenosis
Aortic regurgitation

Loud

Systemic hypertension (aortic component)
Pulmonary hypertension (pulmonary component)

Split

Widens in inspiration (enhanced physiological splitting):

Right bundle branch block
Pulmonary stenosis
Pulmonary hypertension
Ventricular septal defect

Fixed splitting (unaffected by respiration):

Atrial septal defect

Widens in expiration (reversed splitting):

Aortic stenosis
Hypertrophic cardiomyopathy
Left bundle branch block
Ventricular pacing

6.28 Causes of a third heart sound

Physiological

- Healthy young adults
- Athletes
- Pregnancy
- Fever

Pathological

- Large, poorly contracting left ventricle
- Mitral regurgitation

EBE 6.29 Heart failure

In an adult with acute breathlessness a third heart sound is highly suggestive of heart failure with depressed left ventricular ejection fraction. Other useful signs, if present, are raised jugular venous pressure, peripheral oedema and basal lung crackles.

6.30 Grades of intensity of murmur

Grade 1	Heard by an expert in optimum conditions
Grade 2	Heard by a non-expert in optimum conditions
Grade 3	Easily heard; no thrill
Grade 4	A loud murmur, with a thrill
Grade 5	Very loud, often heard over wide area, with thrill
Grade 6	Extremely loud, heard without stethoscope

6.36 Acute limb ischaemia: embolus versus thrombosis in situ

	Embolus	Thrombosis
Onset and severity	Acute (seconds or minutes), ischaemia profound (no pre-existing collaterals)	Insidious (hours or days), ischaemia less severe (pre-existing collaterals)
Embolic source	Present (usually atrial fibrillation)	Absent
Previous claudication	Absent	Present
Pulses in contralateral leg	Present	Often absent
Diagnosis	Clinical	Angiography
Treatment	Embolectomy and anticoagulation	Medical, bypass surgery, thrombolysis

6.34 The clinical features of arterial, neurogenic and venous claudication

	Arterial	Neurogenic	Venous
Pathology	Stenosis or occlusion of major lower limb arteries	Lumbar nerve root or cauda equina compression (spinal stenosis)	Obstruction to the venous outflow of the leg due to iliofemoral venous occlusion
Site of pain	Muscles, usually the calf but may involve thigh and buttocks	Ill defined. Whole leg. May be associated with numbness and tingling	Whole leg. 'Bursting' in nature
Laterality	Unilateral if femoropopliteal, and bilateral if aortoiliac disease	Often bilateral	Nearly always unilateral
Onset	Gradual after walking the 'claudication distance'	Often immediate on walking or standing up	Gradual, from the moment walking starts
Relieving features	On stopping walking, the pain disappears completely in 1–2 minutes	Bending forwards and stopping walking. May sit down for full relief	Leg elevation
Colour	Normal or pale	Normal	Cyanosed. Often visible varicose veins
Temperature	Normal or cool	Normal	Normal or increased
Oedema	Absent	Absent	Always present
Pulses	Reduced or absent	Normal	Present but may be difficult to feel owing to oedema
Straight-leg raising	Normal	May be limited	Normal

6.35 Signs of acute limb ischaemia

Soft signs

- Pulseless
- Pallor
- Perishing cold

Hard signs (indicating a threatened limb)

- Paraesthesia
- Paralysis
- Pain on squeezing muscle

6.33 Classification of lower limb ischaemia

I	Asymptomatic
II	Intermittent claudication
III	Night/rest pain
IV	Tissue loss (ulceration/gangrene)

6.38 Diseases associated with secondary Raynaud's syndrome

- Connective tissue syndromes, e.g. systemic sclerosis, CREST (calcinosis, Raynaud's phenomenon, oesophageal dysfunction, sclerodactyly, telangiectasia) and systemic lupus erythematosus
- Atherosclerosis/embolism from proximal source, e.g. subclavian artery aneurysm
- Drug-related, e.g. nicotine, beta-blockers, ergot
- Thoracic outlet syndrome
- Malignancy
- Hyperviscosity syndromes, e.g. Waldenström's macroglobulinaemia, polycythaemia
- Vibration-induced disorders (power tools)
- Cold agglutinin disorders

6.42 Features of deep vein thrombosis of the lower limb

Clinical feature	Non-occlusive thrombus	Occlusive thrombus
Pain	Often absent	Usually present
Calf tenderness	Often absent	Usually present
Swelling	Absent	Present
Temperature	Normal or slightly increased	Increased
Superficial veins	Normal	Distended
Pulmonary embolism	High risk	Low risk

6.43 Risk factors for deep vein thrombosis

- Recent bed rest or operations (especially to the leg, pelvis or abdomen)
- Recent travel, especially long flights
- Previous trauma to the leg, especially long-bone fractures, plaster of Paris splintage and immobilisation
- Pregnancy or features to suggest pelvic disease
- Malignant disease
- Previous deep vein thrombosis
- Family history of thrombosis
- Recent central venous catheterisation, injection of drugs, etc.

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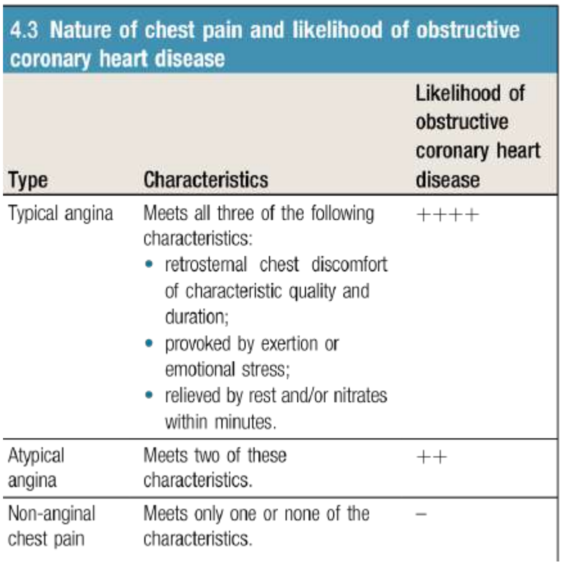

4.3 Nature of chest pain and likelihood of obstructive coronary heart disease

Type	Characteristics	Likelihood of obstructive coronary heart disease
Typical angina	Meets all three of the following characteristics: • retrosternal chest discomfort of characteristic quality and duration; • provoked by exertion or emotional stress; • relieved by rest and/or nitrates within minutes.	++++
Atypical angina	Meets two of these characteristics.	++
Non-anginal chest pain	Meets only one or none of the characteristics.	–

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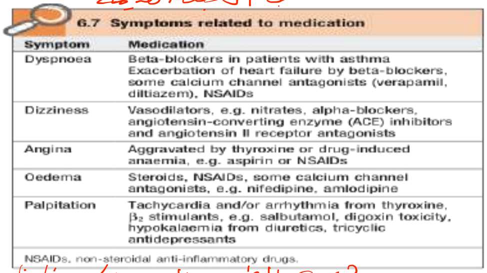

6.7 Symptoms related to medication

Symptom	Medication
Dyspnoea	Beta-blockers in patients with asthma Exacerbation of heart failure by beta-blockers, some calcium channel antagonists (verapamil, diltiazem), NSAIDs
Dizziness	Vasodilators, e.g. nitrates, alpha-blockers, angiotensin-converting enzyme (ACE) inhibitors and angiotensin II receptor antagonists
Angina	Aggravated by thyroxine or drug-induced anaemia, e.g. aspirin or NSAIDs
Oedema	Steroids, NSAIDs, some calcium channel antagonists, e.g. nifedipine, amlodipine
Palpitation	Tachycardia and/or arrhythmia from thyroxine, β_2 stimulants, e.g. salbutamol, digoxin toxicity, hypokalaemia from diuretics, tricyclic antidepressants

NSAIDs, non-steroidal anti-inflammatory drugs.

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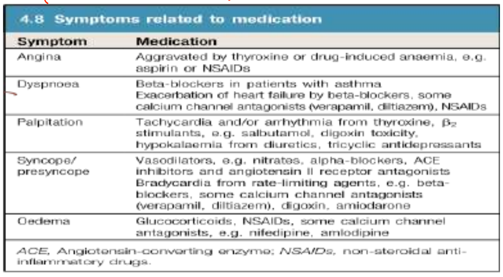

4.8 Symptoms related to medication

Symptom	Medication
Angina	Aggravated by thyroxine or drug-induced anaemia, e.g. aspirin or NSAIDs
Dyspnoea	Beta-blockers in patients with asthma Exacerbation of heart failure by beta-blockers, some calcium channel antagonists (verapamil, diltiazem), NSAIDs
Palpitation	Tachycardia and/or arrhythmia from thyroxine, β_2 stimulants, e.g. salbutamol, digoxin toxicity, hypokalaemia from diuretics, tricyclic antidepressants
Syncope/presyncope	Vasodilators, e.g. nitrates, alpha-blockers, ACE inhibitors and angiotensin II receptor antagonists Bradycardia from rate-limiting agents, e.g. beta-blockers, some calcium channel antagonists (verapamil, diltiazem), digoxin, amiodarone
Oedema	Glucocorticoids, NSAIDs, some calcium channel antagonists, e.g. nifedipine, amlodipine

ACE, Angiotensin-converting enzyme; *NSAIDs*, non-steroidal anti-inflammatory drugs.

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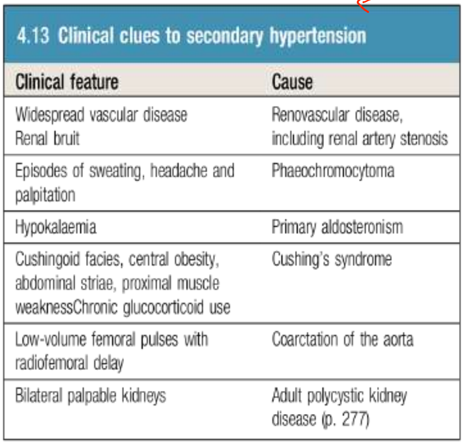

4.13 Clinical clues to secondary hypertension

Clinical feature	Cause
Widespread vascular disease Renal bruit	Renovascular disease, including renal artery stenosis
Episodes of sweating, headache and palpitation	Phaeochromocytoma
Hypokalaemia	Primary aldosteronism
Cushingoid facies, central obesity, abdominal striae, proximal muscle weaknessChronic glucocorticoid use	Cushing's syndrome
Low-volume femoral pulses with radiofemoral delay	Coarctation of the aorta
Bilateral palpable kidneys	Adult polycystic kidney disease (p. 277)

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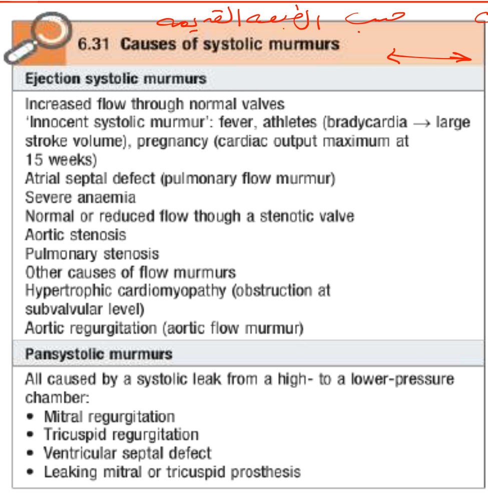

6.31 Causes of systolic murmurs

Ejection systolic murmurs

Increased flow through normal valves
'Innocent systolic murmur': fever, athletes (bradycardia → large stroke volume), pregnancy (cardiac output maximum at 15 weeks)
Atrial septal defect (pulmonary flow murmur)
Severe anaemia
Normal or reduced flow though a stenotic valve
Aortic stenosis
Pulmonary stenosis
Other causes of flow murmurs
Hypertrophic cardiomyopathy (obstruction at subvalvular level)
Aortic regurgitation (aortic flow murmur)

Pansystolic murmurs

All caused by a systolic leak from a high- to a lower-pressure chamber:

- Mitral regurgitation
- Tricuspid regurgitation
- Ventricular septal defect
- Leaking mitral or tricuspid prosthesis

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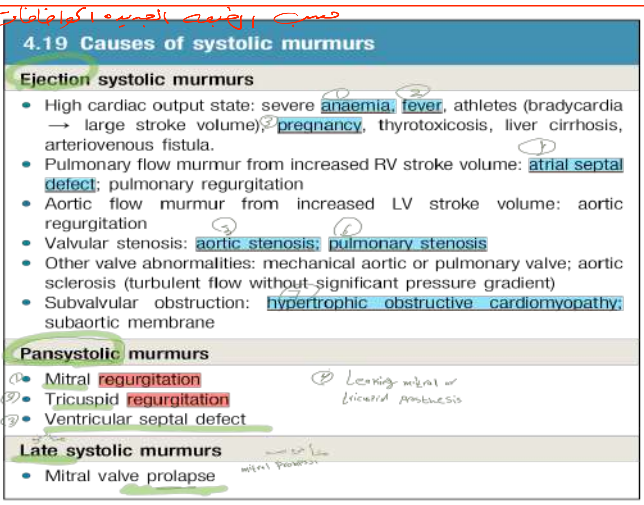

4.19 Causes of systolic murmurs

Ejection systolic murmurs

- High cardiac output state: severe anaemia, fever, athletes (bradycardia → large stroke volume), pregnancy, thyrotoxicosis, liver cirrhosis, arteriovenous fistula.
- Pulmonary flow murmur from increased RV stroke volume: atrial septal defect; pulmonary regurgitation
- Aortic flow murmur from increased LV stroke volume: aortic regurgitation
- Valvular stenosis: aortic stenosis; pulmonary stenosis
- Other valve abnormalities: mechanical aortic or pulmonary valve; aortic sclerosis (turbulent flow without significant pressure gradient)
- Subvalvular obstruction: hypertrophic obstructive cardiomyopathy; subaortic membrane

Pansystolic murmurs

- Mitral regurgitation
- Tricuspid regurgitation
- Ventricular septal defect

(4) Leaking mitral or tricuspid prosthesis

Late systolic murmurs

- Mitral valve prolapse

mitral prolapse

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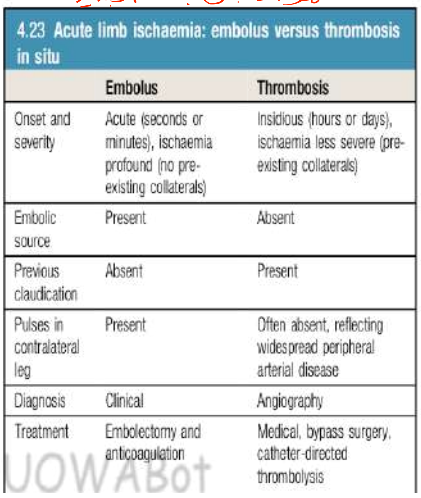


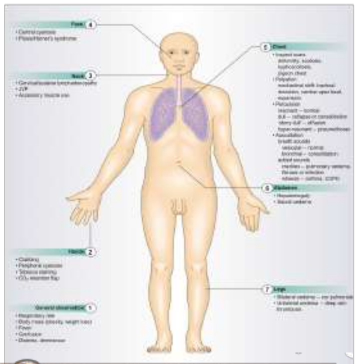
4.23 Acute limb ischaemia: embolus versus thrombosis in situ

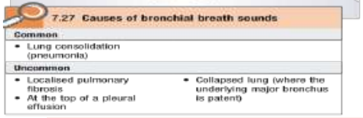
	Embolus	Thrombosis
Onset and severity	Acute (seconds or minutes), ischaemia profound (no pre-existing collaterals)	Insidious (hours or days), ischaemia less severe (pre-existing collaterals)
Embolic source	Present	Absent
Previous claudication	Absent	Present
Pulses in contralateral leg	Present	Often absent, reflecting widespread peripheral arterial disease
Diagnosis	Clinical	Angiography
Treatment	Embolectomy and anticoagulation	Medical, bypass surgery, catheter-directed thrombolysis

UOWABot

Sara Ali

Respiratory system





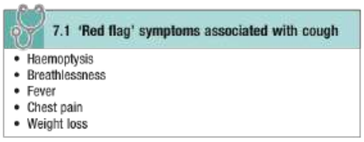
7.27 Causes of bronchial breath sounds

Common

- Lung consolidation (pneumonia)

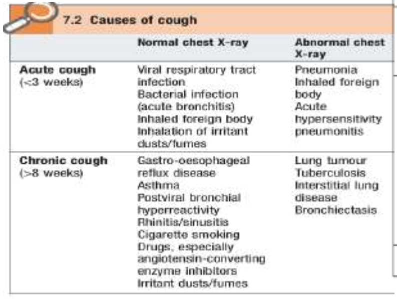
Uncommon

- Localised pulmonary fibrosis
- At the top of a pleural effusion
- Collapsed lung (where the underlying major bronchus is patent)



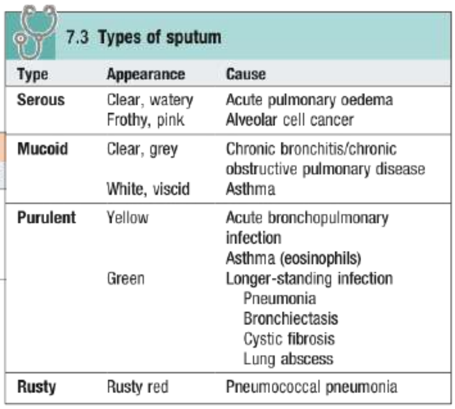
7.1 'Red flag' symptoms associated with cough

- Haemoptysis
- Breathlessness
- Fever
- Chest pain
- Weight loss



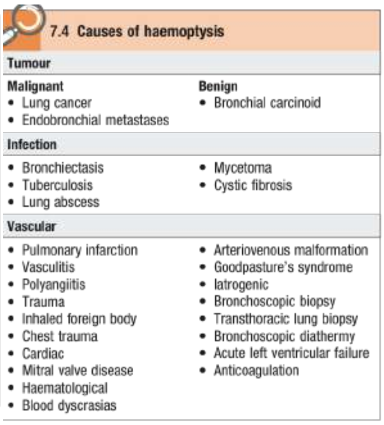
7.2 Causes of cough

	Normal chest X-ray	Abnormal chest X-ray
Acute cough (<3 weeks)	Viral respiratory tract infection Bacterial infection (acute bronchitis) Inhaled foreign body Inhalation of irritant dusts/fumes	Pneumonia Inhaled foreign body Acute hypersensitivity pneumonitis
Chronic cough (>8 weeks)	Gastro-oesophageal reflux disease Asthma Postviral bronchial hyperreactivity Rhinitis/sinusitis Cigarette smoking Drugs, especially angiotensin-converting enzyme inhibitors Irritant dusts/fumes	Lung tumour Tuberculosis Interstitial lung disease Bronchiectasis



7.3 Types of sputum

Type	Appearance	Cause
Serous	Clear, watery	Acute pulmonary oedema
	Frothy, pink	Alveolar cell cancer
Mucoid	Clear, grey	Chronic bronchitis/chronic obstructive pulmonary disease
	White, viscid	Asthma
Purulent	Yellow	Acute bronchopulmonary infection Asthma (eosinophils)
	Green	Longer-standing infection Pneumonia Bronchiectasis Cystic fibrosis Lung abscess
Rusty	Rusty red	Pneumococcal pneumonia



7.4 Causes of haemoptysis

Tumour

Malignant

- Lung cancer
- Endobronchial metastases

Benign

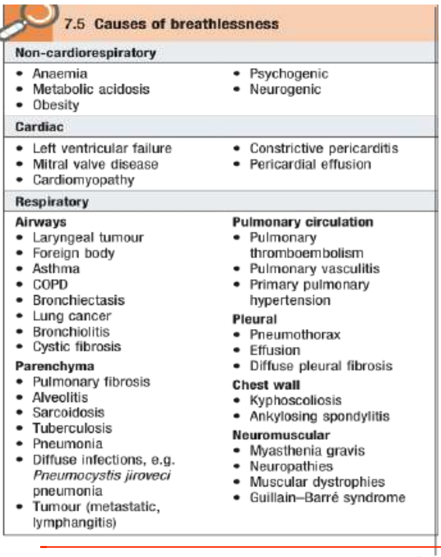
- Bronchial carcinoid

Infection

- Bronchiectasis
- Tuberculosis
- Lung abscess
- Mycetoma
- Cystic fibrosis

Vascular

- Pulmonary infarction
- Vasculitis
- Polyangiitis
- Trauma
- Inhaled foreign body
- Chest trauma
- Cardiac
- Mitral valve disease
- Haematological
- Blood dyscrasias
- Arteriovenous malformation
- Goodpasture's syndrome
- Iatrogenic
- Bronchoscopic biopsy
- Transthoracic lung biopsy
- Bronchoscopic diathermy
- Acute left ventricular failure
- Anticoagulation



7.5 Causes of breathlessness

Non-cardiorespiratory

- Anaemia
- Metabolic acidosis
- Obesity
- Psychogenic
- Neurogenic

Cardiac

- Left ventricular failure
- Mitral valve disease
- Cardiomyopathy
- Constrictive pericarditis
- Pericardial effusion

Respiratory

Airways

- Laryngeal tumour
- Foreign body
- Asthma
- COPD
- Bronchiectasis
- Lung cancer
- Bronchiolitis
- Cystic fibrosis

Parenchyma

- Pulmonary fibrosis
- Alveolitis
- Sarcoidosis
- Tuberculosis
- Pneumonia
- Diffuse infections, e.g. *Pneumocystis jiroveci* pneumonia
- Tumour (metastatic, lymphangitis)

Pulmonary circulation

- Pulmonary thromboembolism
- Pulmonary vasculitis
- Primary pulmonary hypertension

Pleural

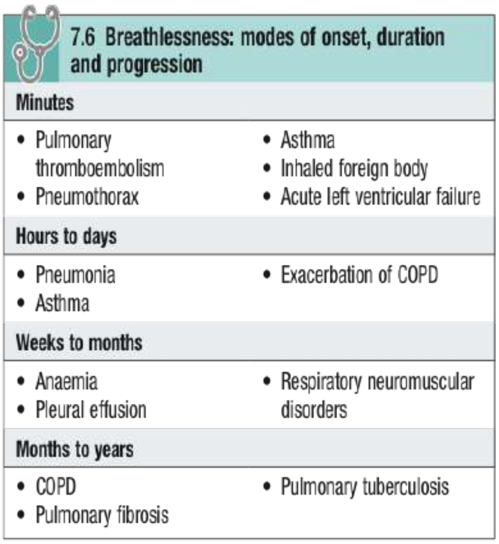
- Pneumothorax
- Effusion
- Diffuse pleural fibrosis

Chest wall

- Kyphoscoliosis
- Ankylosing spondylitis

Neuromuscular

- Myasthenia gravis
- Neuropathies
- Muscular dystrophies
- Guillain–Barré syndrome



7.6 Breathlessness: modes of onset, duration and progression

Minutes

- Pulmonary thromboembolism
- Pneumothorax
- Asthma
- Inhaled foreign body
- Acute left ventricular failure

Hours to days

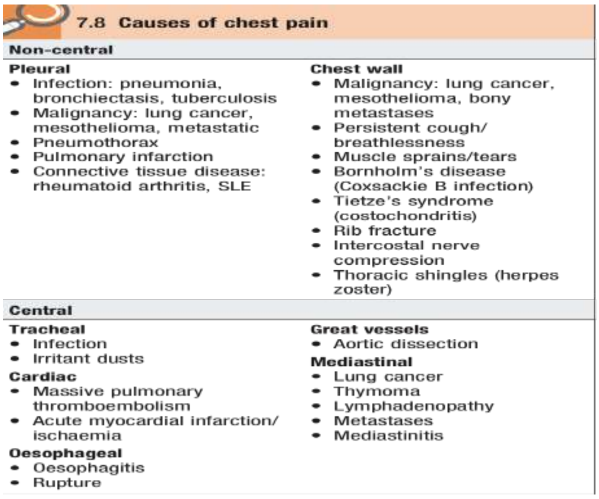
- Pneumonia
- Asthma
- Exacerbation of COPD

Weeks to months

- Anaemia
- Pleural effusion
- Respiratory neuromuscular disorders

Months to years

- COPD
- Pulmonary fibrosis
- Pulmonary tuberculosis



7.8 Causes of chest pain

Non-central

Pleural

- Infection: pneumonia, bronchiectasis, tuberculosis
- Malignancy: lung cancer, mesothelioma, metastatic
- Pneumothorax
- Pulmonary infarction
- Connective tissue disease: rheumatoid arthritis, SLE

Chest wall

- Malignancy: lung cancer, mesothelioma, bony metastases
- Persistent cough/breathlessness
- Muscle sprains/tears
- Bornholm's disease (Coxsackie B infection)
- Tietze's syndrome (costochondritis)
- Rib fracture
- Intercostal nerve compression
- Thoracic shingles (herpes zoster)

Central

Tracheal

- Infection
- Irritant dusts

Cardiac

- Massive pulmonary thromboembolism
- Acute myocardial infarction/ischaemia

Oesophageal

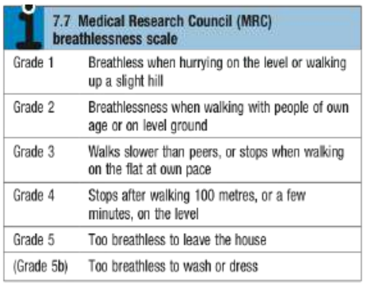
- Oesophagitis
- Rupture

Great vessels

- Aortic dissection

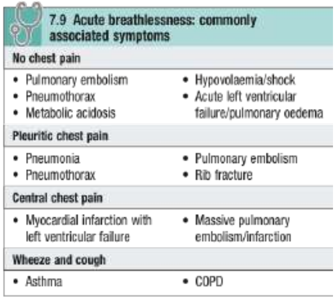
Mediastinal

- Lung cancer
- Thymoma
- Lymphadenopathy
- Metastases
- Mediastinitis



7.7 Medical Research Council (MRC) breathlessness scale

Grade 1	Breathless when hurrying on the level or walking up a slight hill
Grade 2	Breathless when walking with people of own age or on level ground
Grade 3	Walks slower than peers, or stops when walking on the flat at own pace
Grade 4	Stops after walking 100 metres, or a few minutes, on the level
Grade 5	Too breathless to leave the house
(Grade 5b)	Too breathless to wash or dress



7.9 Acute breathlessness: commonly associated symptoms

No chest pain

- Pulmonary embolism
- Pneumothorax
- Metabolic acidosis
- Hypovolaemia/shock
- Acute left ventricular failure/pulmonary oedema

Pleuritic chest pain

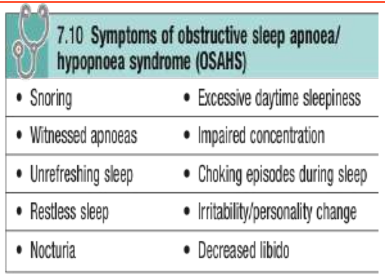
- Pneumonia
- Pneumothorax
- Pulmonary embolism
- Rib fracture

Central chest pain

- Myocardial infarction with left ventricular failure
- Massive pulmonary embolism/infarction

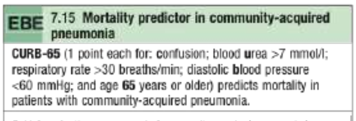
Wheeze and cough

- Asthma
- COPD



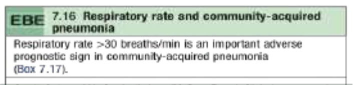
7.10 Symptoms of obstructive sleep apnoea/hypopnoea syndrome (OSAHS)

- Snoring
- Witnessed apnoeas
- Unrefreshing sleep
- Restless sleep
- Nocturia
- Excessive daytime sleepiness
- Impaired concentration
- Choking episodes during sleep
- Irritability/personality change
- Decreased libido



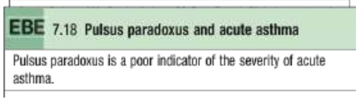
EBE 7.15 Mortality predictor in community-acquired pneumonia

CURB-65 (1 point each for: **c**onfusion; blood **u**rea >7 mmol/l; **r**espiratory rate >30 breaths/min; diastolic **b**lood pressure <60 mmHg; and age **65** years or older) predicts mortality in patients with community-acquired pneumonia.



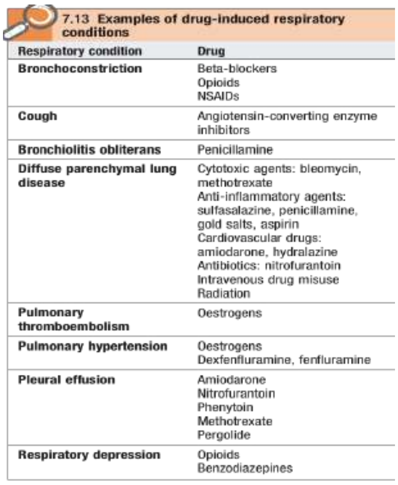
EBE 7.16 Respiratory rate and community-acquired pneumonia

Respiratory rate >30 breaths/min is an important adverse prognostic sign in community-acquired pneumonia (Box 7.17).



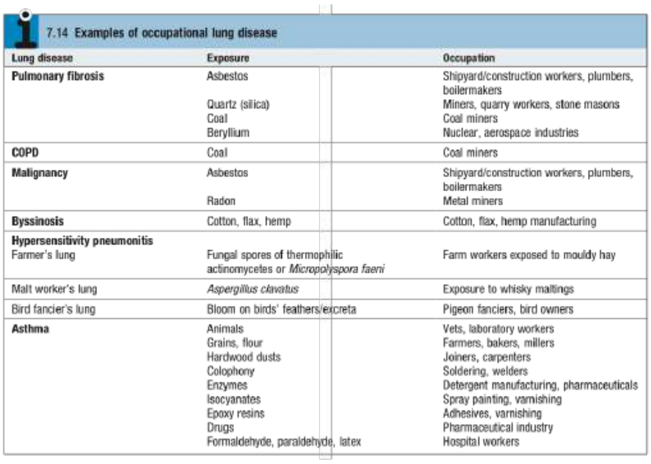
EBE 7.18 Pulsus paradoxus and acute asthma

Pulsus paradoxus is a poor indicator of the severity of acute asthma.



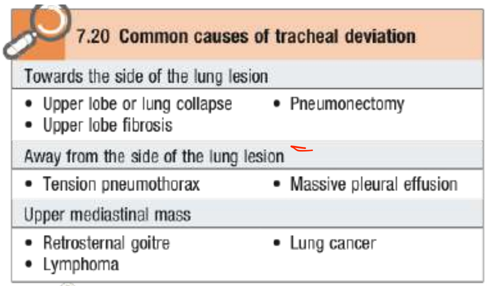
7.13 Examples of drug-induced respiratory conditions

Respiratory condition	Drug
Bronchoconstriction	Beta-blockers Opioids NSAIDs
Cough	Angiotensin-converting enzyme inhibitors
Bronchiolitis obliterans	Penicillamine
Diffuse parenchymal lung disease	Cytotoxic agents: bleomycin, methotrexate Anti-inflammatory agents: sulfasalazine, penicillamine, gold salts, aspirin Cardiovascular drugs: amiodarone, hydralazine Antibiotics: nitrofurantoin Intravenous drug misuse Radiation
Pulmonary thromboembolism	Oestrogens
Pulmonary hypertension	Oestrogens Dexfenfluramine, fenfluramine
Pleural effusion	Amiodarone Nitrofurantoin Phenytoin Methotrexate Pergolide
Respiratory depression	Opioids Benzodiazepines



7.14 Examples of occupational lung disease

Lung disease	Exposure	Occupation
Pulmonary fibrosis	Asbestos	Shipyard/construction workers, plumbers, boilermakers
	Quartz (silica)	Miners, quarry workers, stone masons
	Coal	Coal miners
	Beryllium	Nuclear, aerospace industries
COPD	Coal	Coal miners
Malignancy	Asbestos	Shipyard/construction workers, plumbers, boilermakers
	Radon	Metal miners
Byssinosis	Cotton, flax, hemp	Cotton, flax, hemp manufacturing
Hypersensitivity pneumonitis		
Farmer's lung	Fungal spores of thermophilic actinomycetes or *Micropolyspora faeni*	Farm workers exposed to mouldy hay
Malt worker's lung	*Aspergillus clavatus*	Exposure to whisky maltings
Bird fancier's lung	Bloom on birds' feathers/excreta	Pigeon fanciers, bird owners
Asthma	Animals	Vets, laboratory workers
	Grains, flour	Farmers, bakers, millers
	Hardwood dusts	Joiners, carpenters
	Colophony	Soldering, welders
	Enzymes	Detergent manufacturing, pharmaceuticals
	Isocyanates	Spray painting, varnishing
	Epoxy resins	Adhesives, varnishing
	Drugs	Pharmaceutical industry
	Formaldehyde, paraldehyde, latex	Hospital workers



7.20 Common causes of tracheal deviation

Towards the side of the lung lesion

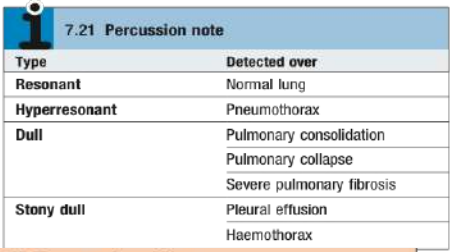
- Upper lobe or lung collapse
- Upper lobe fibrosis
- Pneumonectomy

Away from the side of the lung lesion

- Tension pneumothorax
- Massive pleural effusion

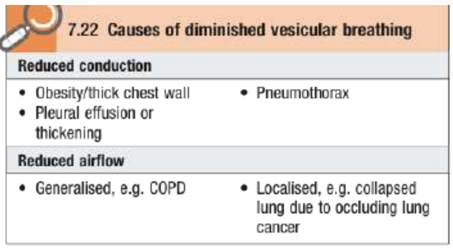
Upper mediastinal mass

- Retrosternal goitre
- Lymphoma
- Lung cancer



7.21 Percussion note

Type	Detected over
Resonant	Normal lung
Hyperresonant	Pneumothorax
Dull	Pulmonary consolidation
	Pulmonary collapse
	Severe pulmonary fibrosis
Stony dull	Pleural effusion
	Haemothorax



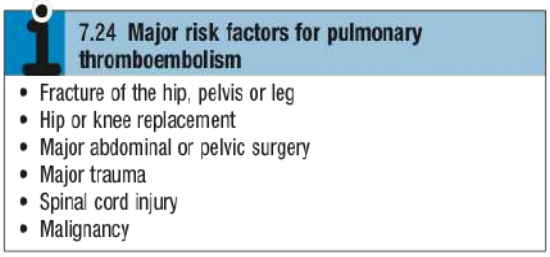
7.22 Causes of diminished vesicular breathing

Reduced conduction

- Obesity/thick chest wall
- Pleural effusion or thickening
- Pneumothorax

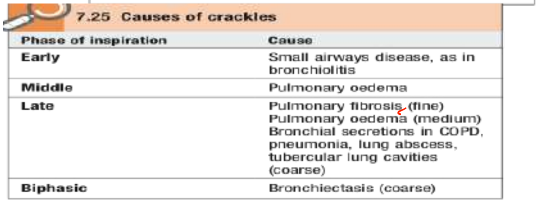
Reduced airflow

- Generalised, e.g. COPD
- Localised, e.g. collapsed lung due to occluding lung cancer



7.24 Major risk factors for pulmonary thromboembolism

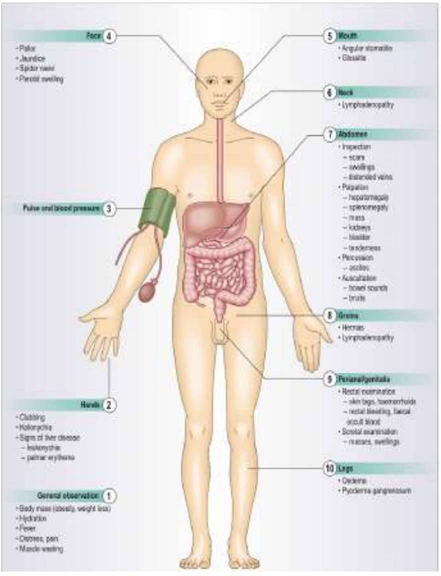
- Fracture of the hip, pelvis or leg
- Hip or knee replacement
- Major abdominal or pelvic surgery
- Major trauma
- Spinal cord injury
- Malignancy



7.25 Causes of crackles

Phase of inspiration	Cause
Early	Small airways disease, as in bronchiolitis
Middle	Pulmonary oedema
Late	Pulmonary fibrosis (fine) Pulmonary oedema (medium) Bronchial secretions in COPD, pneumonia, lung abscess, tubercular lung cavities (coarse)
Biphasic	Bronchiectasis (coarse)

Gastrointestinal system



8.1 Surface markings of the gastrointestinal system

Structure	Position
Liver	Upper border: fifth right intercostal space on full expiration Lower border: at the costal margin in the mid-clavicular line on full inspiration
Spleen	Underlies left ribs 9–11, posterior to the mid-axillary line
Gallbladder	At the intersection of the right lateral vertical plane and the costal margin, i.e. tip of the ninth costal cartilage
Pancreas	Neck of the pancreas lies at the level of L1; head lies below and left; tail lies above and right
Kidneys	Upper pole lies deep to the 12th rib posteriorly, 7 cm from the midline; the right is 2–3 cm lower than the left

8.4 Causes of a painful mouth

Idiopathic

- Recurrent aphthous mouth ulcers

Infections

- Candidiasis
- Dental sepsis
- Herpes simplex virus (HSV1 and 2)
- Coxsackie A virus: herpangina; hand, foot and mouth; Vincent's angina (ulcerative gingivitis)

Miscellaneous

- Trauma from teeth/dentures
- Leukoplakia

Associated with systemic disorder

- Drug allergies, e.g. sulphonamides, gold, cytotoxics
- Iron, folate, vitamin B_{12} deficiency
- Leucopenia, acute leukaemia
- Reactive arthritis, Behçet's disease
- Crohn's disease, ulcerative colitis
- Coeliac disease

Associated with skin disorder

- Lichen planus, erythema multiforme
- Pemphigoid, pemphigus vulgaris

8.6 Non-alimentary causes of abdominal pain

Disorder	Clinical features
Myocardial infarction	Epigastric pain without tenderness Angor animi (feeling of impending death), hypotension, cardiac arrhythmias
Dissecting aortic aneurysm	Tearing interscapular pain Angor animi, hypotension Asymmetry of femoral pulses
Acute vertebral collapse	Lateralised pain restricting movement Tenderness overlying the involved vertebra
Cord compression	Pain on percussion of thoracic spine Hyperaesthesia in dermatomal distribution Spinal cord signs
Pleurisy	Lateralised pain on coughing Chest signs, e.g. pleural rub
Herpes zoster	Hyperaesthesia in dermatomal distribution Vesicular eruption
Diabetic ketoacidosis	Cramp-like pain, vomiting, air hunger Tachycardia, ketotic breath
Salpingitis or tubal pregnancy	Suprapubic and iliac fossa pain, localised tenderness, nausea, vomiting, fever
Torsion of the testis/ovary	Lower abdominal pain Nausea, vomiting, localised tenderness

8.2 Other gastrointestinal terms

Symptom	Definition
Upper gastrointestinal	
Xerostomia	Dry mouth
Halitosis	Bad breath due to gingival, dental or pharyngeal infection
Dysgeusia	Altered taste sensation
Cacageusia	Foul taste sensation, e.g. rotting food
Hiccups	Persistent hiccups suggest diaphragmatic disorder
Lower gastrointestinal	
Steatorrhoea	Fatty stools, pale, greasy, difficult to flush
Haematochezia	Rectal bleeding
Anismus/dyschezia	Difficulty emptying the rectum despite prolonged straining

8.7 Causes of dysphagia

Oral

- Tonsillitis, glandular fever, pharyngitis, peritonsillar abscess
- Painful mouth ulcers

Neurological

- Bulbar or pseudobulbar palsy
- Cerebrovascular accident

Neuromuscular

- Achalasia
- Pharyngeal pouch
- Myasthenia gravis
- Oesophageal dysmotility

Mechanical

- Oesophageal cancer
- Peptic oesophagitis
- Other benign strictures, e.g. after prolonged nasogastric intubation
- Extrinsic compression, e.g. lung cancer
- Systemic sclerosis

8.9 Non-alimentary causes of vomiting

Neurological

- Raised intracranial pressure, e.g. meningitis, brain tumour
- Labyrinthitis and Ménière's disease
- Migraine
- Vasovagal syncope, shock, fear and severe pain, e.g. renal colic, myocardial infarction

Drugs

- Alcohol, opioids, theophyllines, digoxin, cytotoxic agents, antidepressants
- Consider any drug

Metabolic/endocrine

- Pregnancy
- Diabetic ketoacidosis
- Renal failure
- Liver failure
- Hypercalcaemia
- Addison's disease

Psychological

- Anorexia nervosa
- Bulimia

8.11 Causes of abdominal distension

Factor	Consider
Fat	Obesity
Flatus	Pseudo-obstruction, obstruction
Faeces	Subacute obstruction, constipation
Fluid	Ascites, tumours (especially ovarian), distended bladder
Fetus	Check date of the last menstrual period
Functional	Bloating, often associated with irritable bowel syndrome

8.12 Causes of ascites

Diagnosis	Comment
Common	
Hepatic cirrhosis with portal hypertension	Transudate
Intra-abdominal malignancy with peritoneal spread	Exudate, cytology may be positive
Uncommon	
Hepatic vein occlusion (Budd–Chiari syndrome)	Transudate in acute phase
Constrictive pericarditis and other right heart failure	Check jugular venous pressure and listen for pericarditic rub
Hypoproteinaemia (nephrotic syndrome, protein-losing enteropathy)	Transudate
Tuberculosis peritonitis	Low glucose content
Pancreatitis	Very high amylase content

8.13 Causes of diarrhoea

Acute

- Infective gastroenteritis, e.g. *Clostridium difficile*
- Drugs (especially antibiotics)

Chronic (>4 weeks)

- Irritable bowel syndrome
- Inflammatory bowel disease
- Parasitic infestations, e.g. *Giardia lamblia*, amoebiasis, *Cryptosporidium* spp.
- Colorectal cancer
- Autonomic neuropathy (especially diabetic)
- Laxative abuse and other drug therapies
- Hyperthyroidism
- Constipation and faecal impaction (overflow)
- Small-bowel or right colonic resection
- Malabsorption, e.g. lactose deficiency, coeliac disease

8.21 Causes of rectal bleeding

- Haemorrhoids
- Anal fissure
- Colorectal polyps
- Colorectal cancer
- Inflammatory bowel disease
- Ischaemic colitis
- Complicated diverticular disease
- Vascular malformation

8.19 Causes of upper gastrointestinal bleeding

- Gastric or duodenal ulcer
- Mallory–Weiss oesophageal tear
- Oesophagitis, gastritis, duodenitis
- Oesophagogastric varices
- Oesophageal or gastric cancer
- Vascular malformation

8.17 Causes of constipation

- Lack of fibre in diet
- Irritable bowel syndrome
- Intestinal obstruction (cancer)
- Drugs (opioids, iron)
- Metabolic/endocrine (hypothyroidism, hypercalcaemia)
- Immobility (stroke, Parkinson's disease)

8.22 Common causes of jaundice

Increased bilirubin production

- Haemolysis (unconjugated hyperbilirubinaemia)

Impaired bilirubin excretion

- Congenital
  - Gilbert's syndrome (unconjugated)
- Hepatocellular
  - Viral hepatitis
  - Cirrhosis
  - Drugs
  - Autoimmune hepatitis
- Intrahepatic cholestasis
  - Drugs
  - Primary biliary cirrhosis
- Extrahepatic cholestasis
  - Gallstones
  - Cancer: pancreas, cholangiocarcinoma

8.26 Gastrointestinal (GI) 'alarm features'

- Persistent vomiting
- Dysphagia
- Fever
- Weight loss
- GI bleeding
- Anaemia
- Painless, watery, high-volume diarrhoea
- Nocturnal symptoms disturbing sleep

8.27 Risk factors for viral hepatitis

- Intravenous drug use
- Tattoos
- Foreign travel
- Blood transfusion
- Sex between men or with prostitutes
- Multiple sexual partners

8.30 Signs of liver failure

- Fetor hepaticus: stale 'mousy' smell of the volatile amine, dimethyl sulphide, on the breath
- Flapping tremor of outstretched arms with hands dorsiflexed ('asterixis')

Mental state varies from drowsiness with day/night pattern reversed, through confusion and disorientation, to unresponsive coma

- Late neurological features
  - Spasticity and extension of the arms and legs
  - Extensor plantar responses

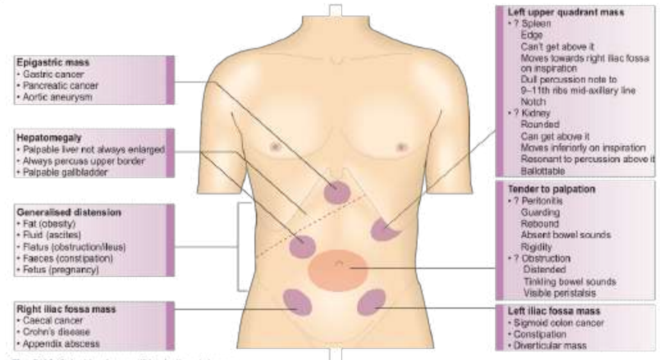


Fig. 8.14 Palpable abnormalities in the abdomen.

8.33 Causes of hepatomegaly

Chronic parenchymal liver disease

- Alcoholic liver disease
- Hepatic steatosis
- Autoimmune hepatitis
- Viral hepatitis
- Primary biliary cirrhosis

Malignancy

- Primary hepatocellular cancer
- Secondary metastatic cancer

Right heart failure

Haematological disorders

- Lymphoma
- Leukaemia
- Myelofibrosis
- Polycythaemia

Rarities

- Amyloidosis
- Budd–Chiari syndrome
- Sarcoidosis
- Glycogen storage disorders

8.34 Grading of hepatic encephalopathy (West Haven)

Stage	State of consciousness
0	No change in personality or behaviour No asterixis (flapping tremor)
1	Impaired concentration and attention span Sleep disturbance, slurred speech Euphoria or depression Asterixis present
2	Lethargy, drowsiness, apathy or aggression Disorientation, inappropriate behaviour, slurred speech
3	Confusion and disorientation, bizarre behaviour Drowsiness or stupor Asterixis usually absent
4	Comatose with no response to voice commands Minimal or absent response to painful stimuli

8.35 Causes of splenomegaly

Haematological disorders

- Lymphoma and lymphatic leukaemias
- Myeloproliferative diseases, polycythaemia rubra vera and myelofibrosis
- Haemolytic anaemia, congenital spherocytosis

Portal hypertension

Infections

- Glandular fever
- Malaria, kala azar (leishmaniasis)
- Brucellosis, tuberculosis, salmonellosis
- Bacterial endocarditis

Rheumatological conditions

- Rheumatoid arthritis (Felty's syndrome)
- Systemic lupus erythematosus

Rarities

- Sarcoidosis
- Amyloidosis
- Glycogen storage disorders

8.36 Differentiating a palpable spleen from the left kidney

Distinguishing feature	Spleen	Kidney
Mass is smooth and regular in shape	More likely	Polycystic kidneys are bilateral irregular masses
Mass descends in inspiration	Yes, travels superficially and diagonally	Yes, moves deeply and vertically
Able to feel deep to the mass	Yes	No
Palpable notch on the medial surface	Yes	No
Bilateral masses palpable	No	Sometimes, e.g. polycystic kidneys
Percussion resonant over the mass	No	Sometimes
Mass extends beyond the midline	Sometimes	No (except with horseshoe kidney)

8.37 Causes of hepatosplenomegaly

Lymphoma
Myeloproliferative diseases
Cirrhosis with portal hypertension

- Amyloidosis, sarcoidosis, glycogen storage disease

8.39 Causes of palpable swellings in the groin

- Inguinal hernia: indirect and direct
- Femoral hernia
- Lymph node(s)
- Saphena varix (a varicosity of the long saphenous vein)
- Skin and subcutaneous lumps, e.g. lipoma, sebaceous cyst
- Hydrocoele of spermatic cord
- Undescended testis
- Femoral aneurysm
- Psoas abscess

6.8 Urine and stool analysis in jaundice

	Urine			Stools
	Colour	Bilirubin	Urobilinogen	Colour
Unconjugated	Normal	–	++++	Normal
Hepatocellular	Dark	++	++	Normal
Obstructive	Dark	++++	–	Pale

موجود بالطبعه الجديده

8.41 Causes of abnormal stool appearance

Stool appearance	Cause
Abnormally pale	Biliary obstruction
Pale and greasy	Steatorrhoea
Black and tarry (melaena)	Bleeding from the upper gastrointestinal tract
Grey/black	Oral iron or bismuth therapy
Silvery	Steatorrhoea plus upper gastrointestinal bleeding, e.g. pancreatic cancer
Fresh blood in or on stool	Large-bowel, rectal or anal bleeding
Stool mixed with pus	Infective colitis or inflammatory bowel disease
Ricewater stool (watery with mucus and cell debris)	Cholera

6.9 Examples of drug-induced gastrointestinal conditions

Symptom	Drug
Weight gain	Oral glucocorticoids
Dyspepsia and gastrointestinal bleeding	Aspirin Non-steroidal anti-inflammatory drugs
Nausea	Many drugs, including selective serotonin reuptake inhibitor antidepressants
Diarrhoea (pseudomembranous colitis)	Antibiotics Proton pump inhibitors
Constipation	Opioids
Jaundice: hepatitis	Paracetamol (overdose) Pyrazinamide Rifampicin Isoniazid
Jaundice: cholestatic	Flucloxacillin Chlorpromazine Co-amoxiclav
Liver fibrosis	Methotrexate

6.10 Specific signs in the 'acute abdomen'

موجودات بالطبعه الجديده

Sign	Disease associations	Examination
Murphy's	Acute cholecystitis: Sensitivity 50–97% Specificity 50–80%	As the patient takes a deep breath in, gently palpate in the right upper quadrant of the abdomen; the acutely inflamed gallbladder contacts the examining fingers, evoking pain with the arrest of inspiration
Rovsing's	Acute appendicitis: Sensitivity 20–70% Specificity 40–96%	Palpation in the left iliac fossa produces pain in the right iliac fossa
Iliopsoas	Retroileal appendicitis, iliopsoas abscess, perinephric abscess	Ask the patient to flex their thigh against the resistance of your hand; a painful response indicates an inflammatory process involving the right psoas muscle
Grey Turner's and Cullen's	Haemorrhagic pancreatitis, aortic rupture and ruptured ectopic pregnancy (see Fig. 6.13)	Bleeding into the falciform ligament; bruising develops around the umbilicus (Cullen) or in the loins (Grey Turner)

Sara Ali

EBE 3.7 Central cyanosis

The minimum arterial level of deoxyhaemoglobin required to detect central cyanosis is 2.38 g/dl. The mean value for detection is 3.48 ± 0.55 g/dl.

Barnett HB, Holland JG, Josenhans WT. When does central cyanosis become detectable? Clin Invest Med 1982;5:39–43.
McGee S. Evidence based physical diagnosis, 2nd edn. St Louis, MO: Saunders, Elsevier, 2007, p. 86.

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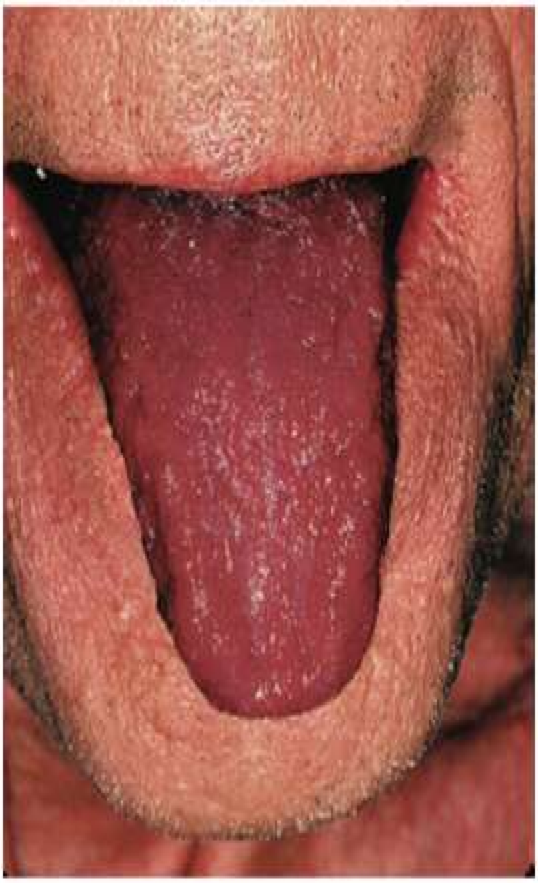


Fig. 7.5 Central cyanosis of the tongue.

Central Cyanosis of the tongue

Purplish blue discoloration in natural light

Skin lesions associated with respiratory conditions

Erythema nodosum on the shins is a feature of acute sarcoidosis and tuberculosis

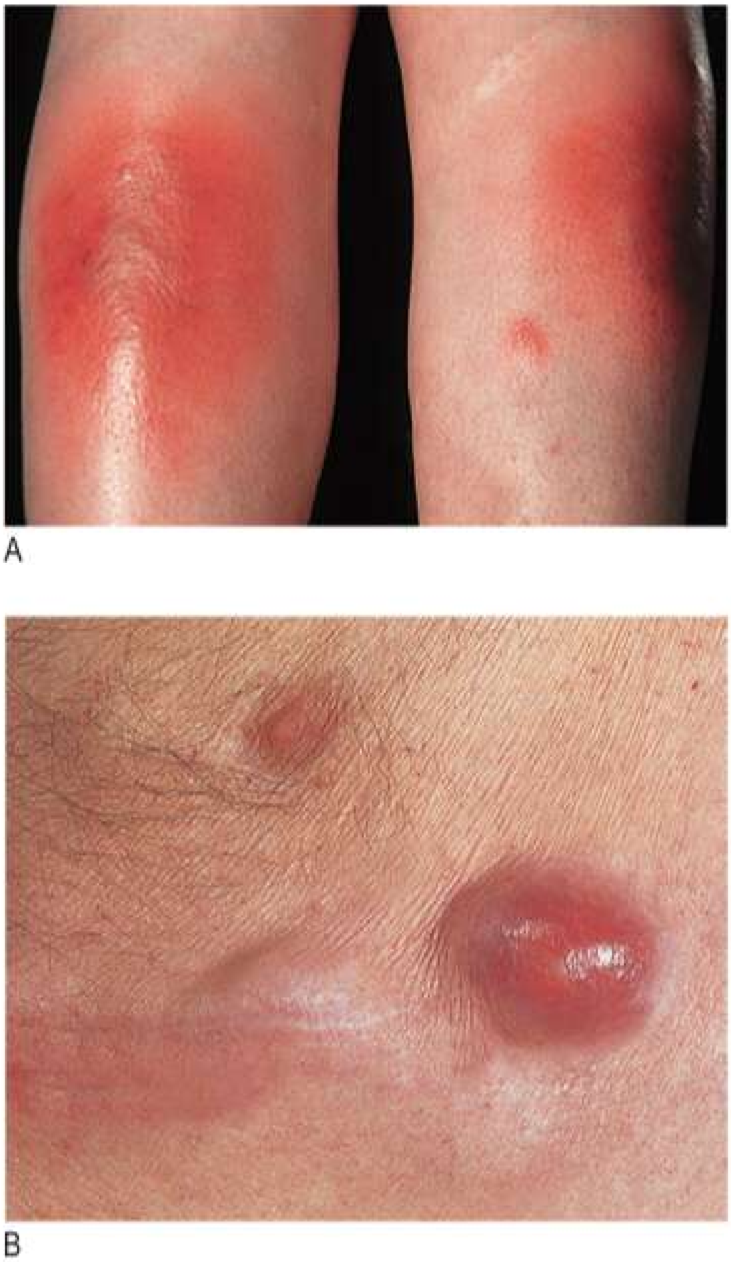


Fig. 7.6 Skin lesions associated with respiratory conditions. **(A)** Erythema nodosum on the shins. **(B)** Metastatic skin nodes of lung cancer.

Skin lesions associated with respiratory conditions

Metastatic skin nodes of lung cancer Raised, firm, non-tender subcutaneous nodules may occur in patients with disseminated cancer

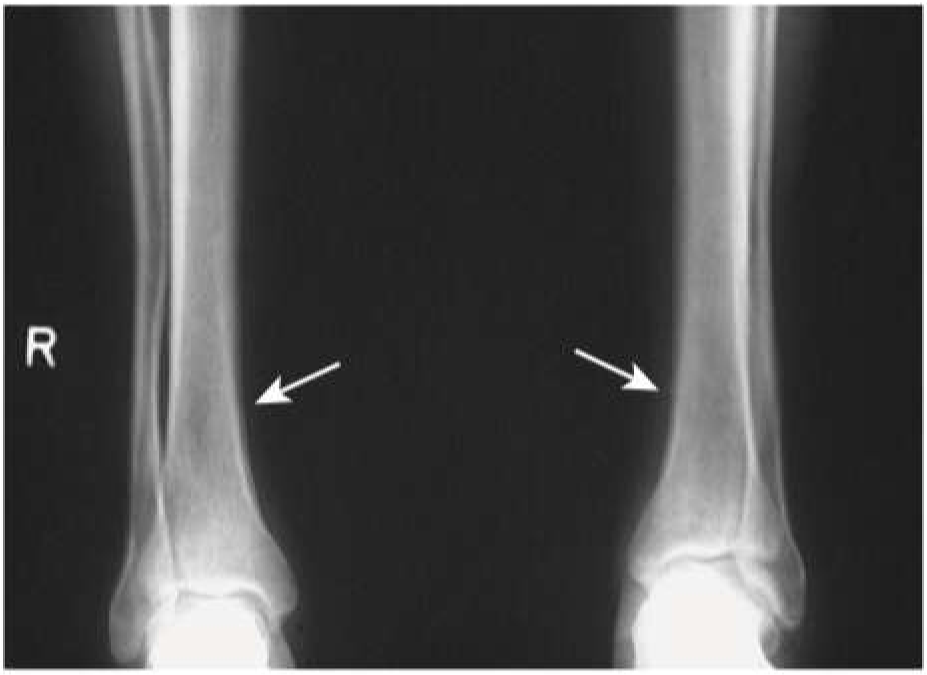


Fig. 7.7 **X-ray of the lower legs in hypertrophic pulmonary osteoarthropathy.** Arrows show periosteal reaction.

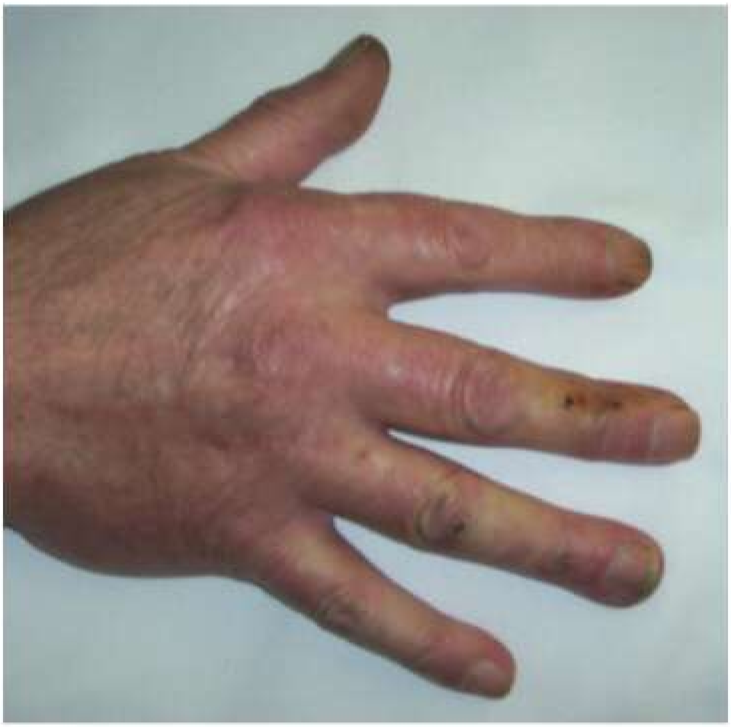
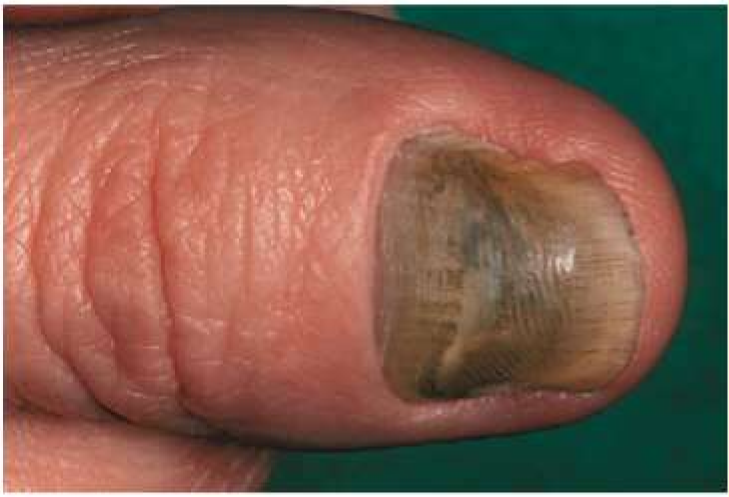


Fig. 7.8 Tobacco 'tar'-stained fingers.

Tobacco 'tar'–stained fingers

A brownish stain on the fingers and nails in cigarette smokers is caused by tar, not–nicotine



Yellow nail syndrome

The rare ‘yellow nail syndrome’ is associated with lymphedema and an exudative pleural effusion

Fig. 7.9 Yellow nail syndrome.

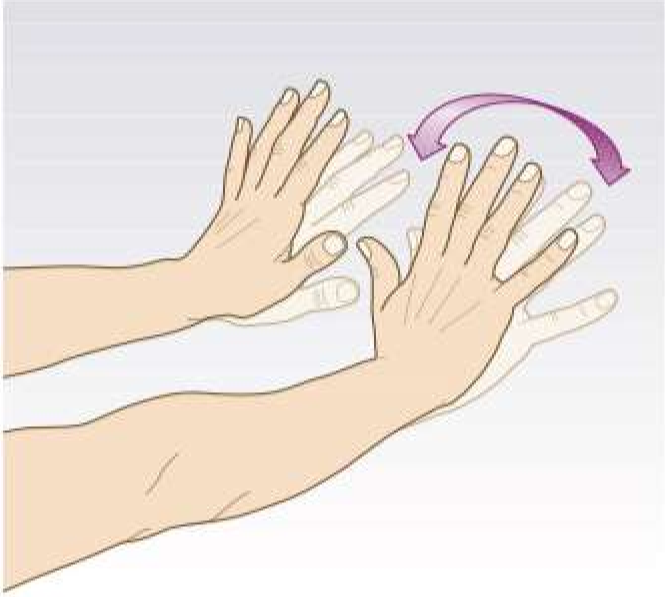


Fig. 7.10 **Asterixis.** Hand and arm position for observing the ‘flapping tremor’ of CO_2 retention.

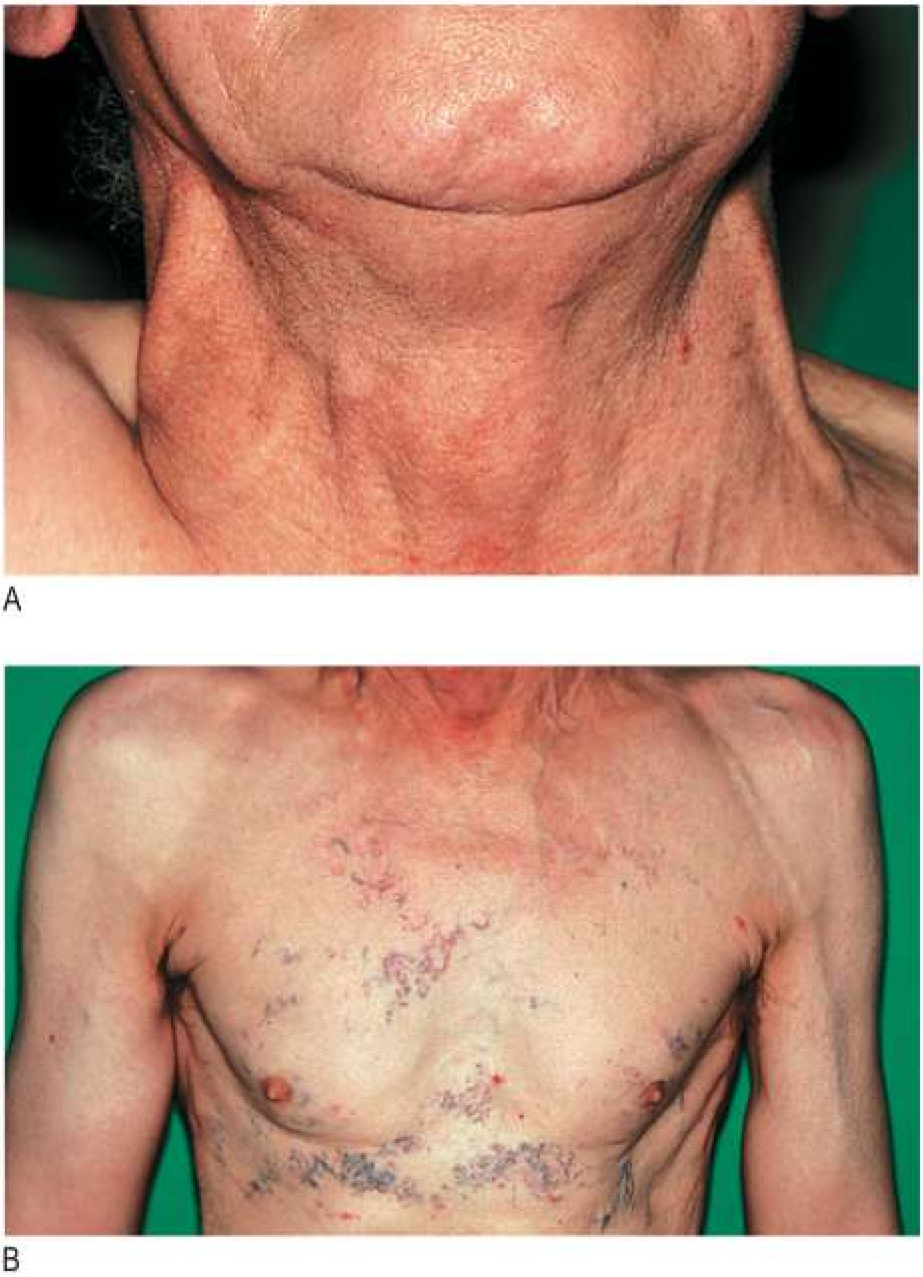


Fig. 7.11 **Superior vena caval obstruction. (A)** Distended neck veins. **(B)** Dilated superficial veins over chest.

Superior vena caval obstruction

the JVP is raised and non-pulsatile, and the abdomino-jugular reflex is absent. Most cases are due to lung cancer compressing the superior vena cava

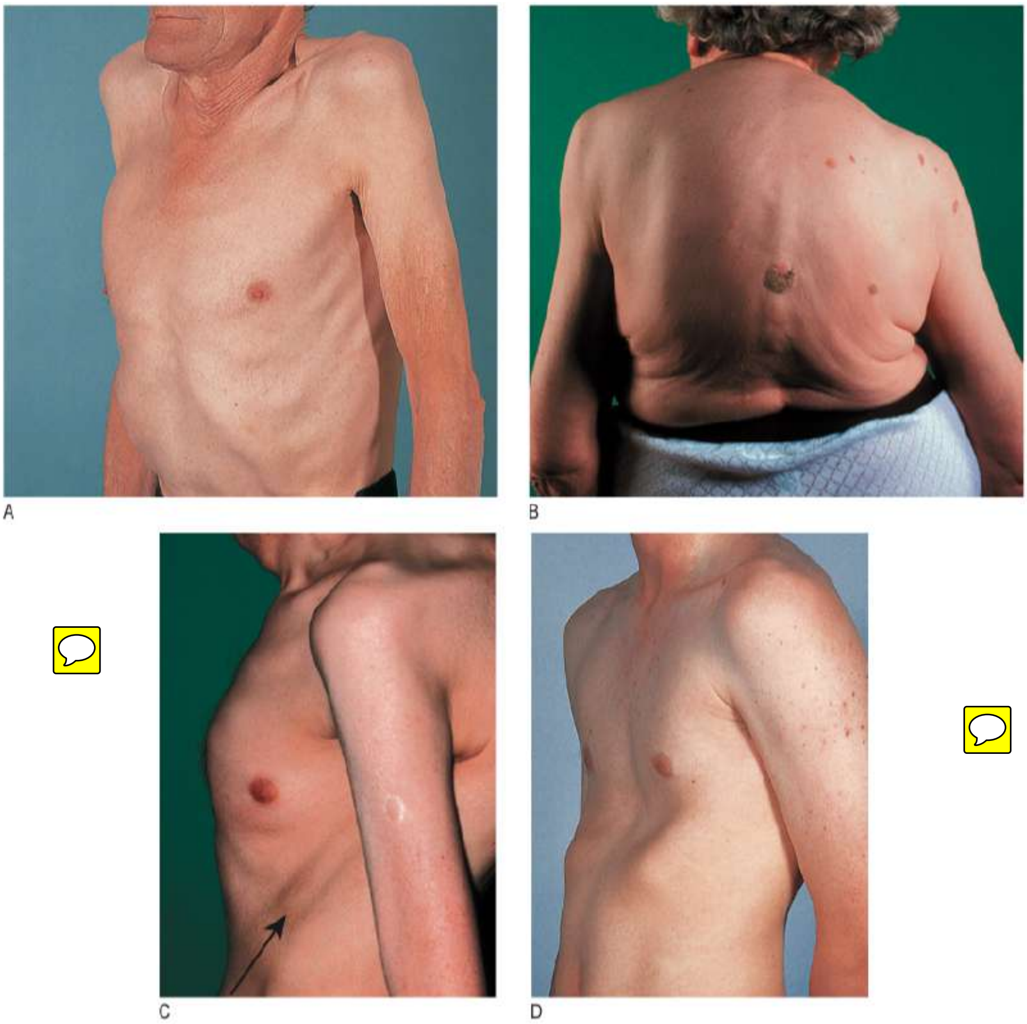


Fig. 7.14 Abnormalities in the shape of the chest. (A) Hyperinflated chest with intercostal indrawing. **(B)** Kyphoscoliosis. **(C)** Pectus carinatum with prominent Harrison's sulcus (arrow). **(D)** Pectus excavatum.

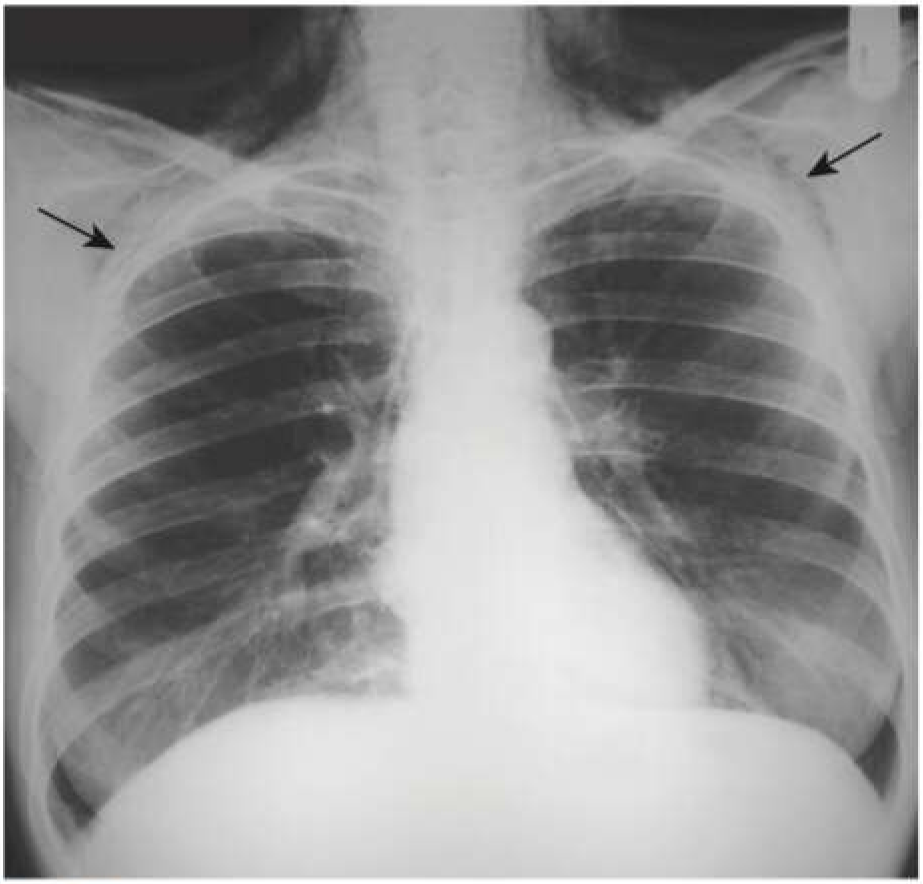


Fig. 7.17 Subcutaneous emphysema seen over the neck and chest wall on chest X-ray (arrowed).

Fig. 7.20 Clinical signs of common respiratory conditions. JVP, jugular venous pressure; SVCO, superior vena caval obstruction.

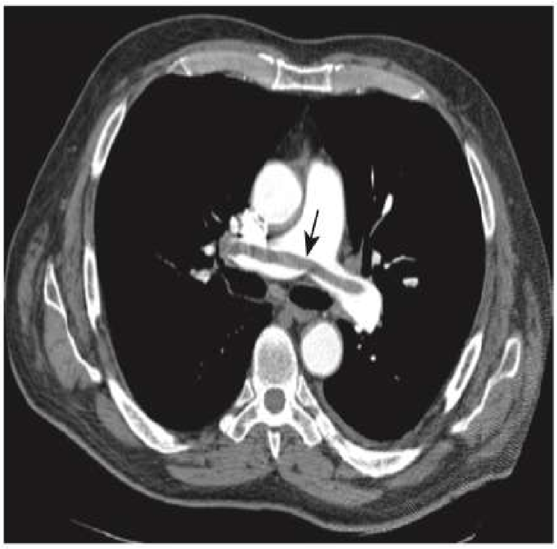


Fig. 7.21 (CT) **pulmonary angiogram** showing large embolus within the main pulmonary artery (arrowed).

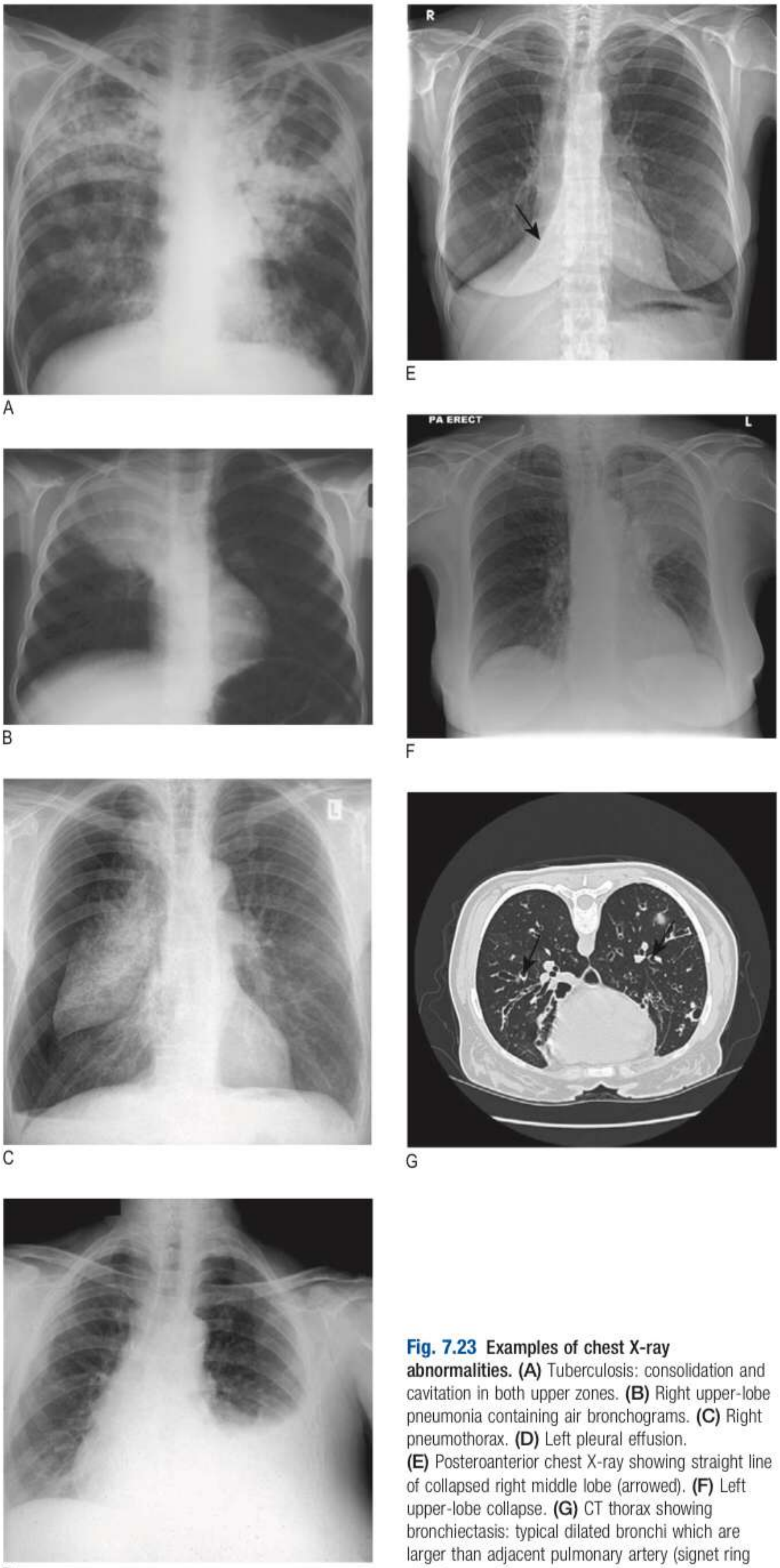


Fig. 7.23 Examples of chest X-ray abnormalities. **(A)** Tuberculosis: consolidation and cavitation in both upper zones. **(B)** Right upper-lobe pneumonia containing air bronchograms. **(C)** Right pneumothorax. **(D)** Left pleural effusion. **(E)** Posteroanterior chest X-ray showing straight line of collapsed right middle lobe (arrowed). **(F)** Left upper-lobe collapse. **(G)** CT thorax showing bronchiectasis: typical dilated bronchi which are larger than adjacent pulmonary artery (signet ring sign) (arrows).

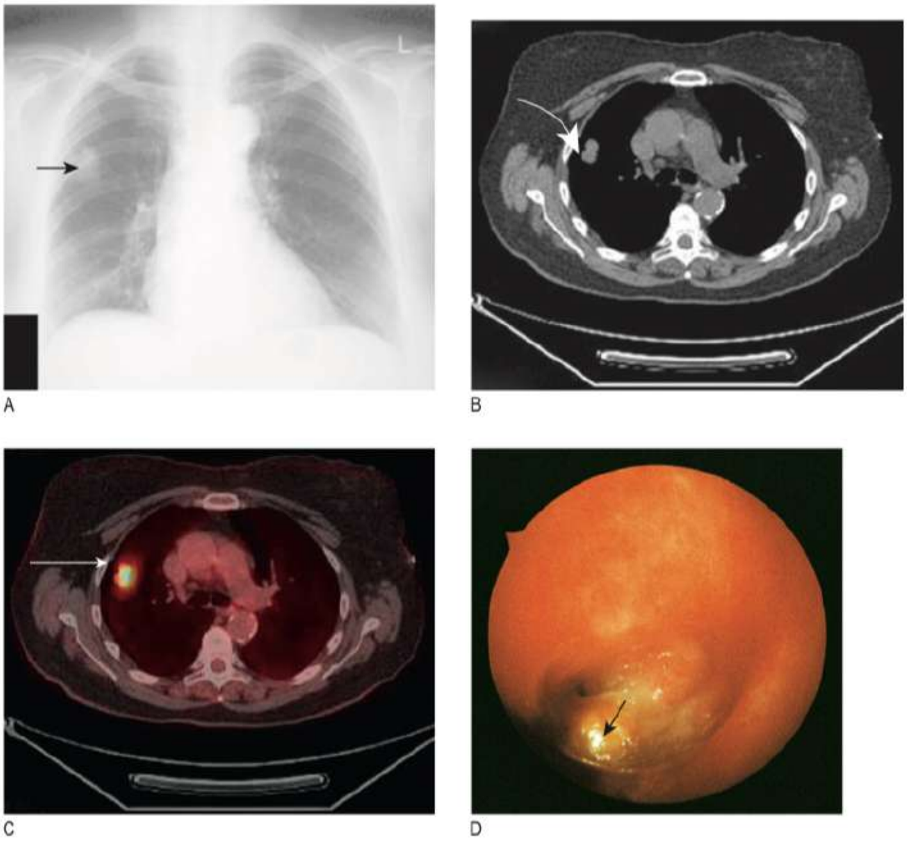


Fig. 7.24 Lung cancer in right lung. (A) Chest X-ray. **(B)** CT of thorax. **(C)** Positron emission tomography showing increased uptake in tumour. **(D)** Lung cancer seen through a bronchoscope (arrow).

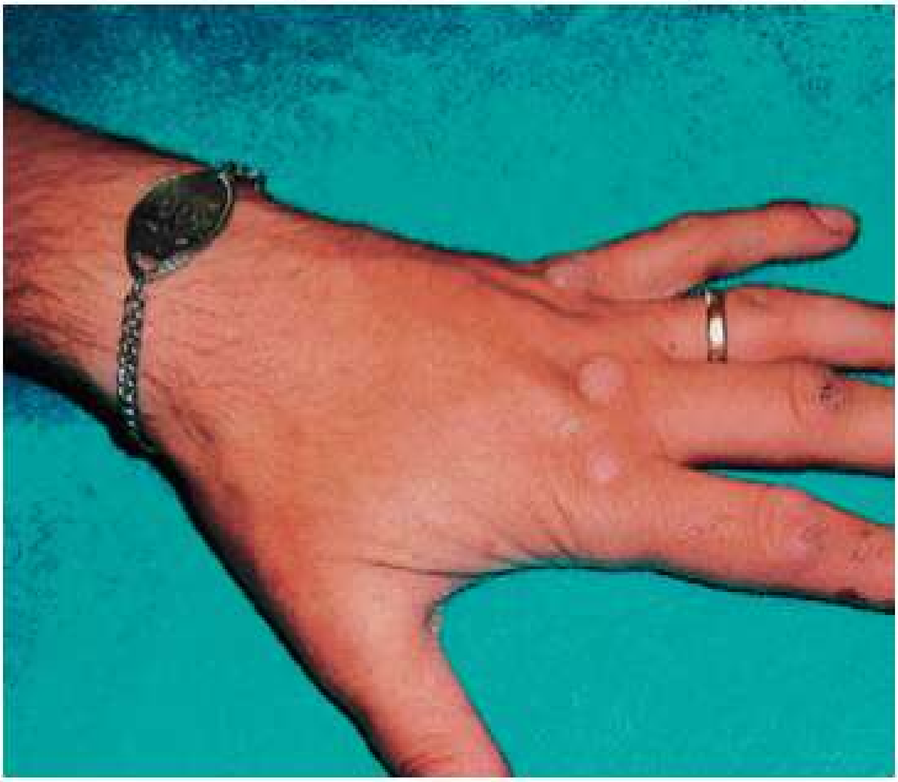


Fig. 3.3 MedicAlert bracelet.

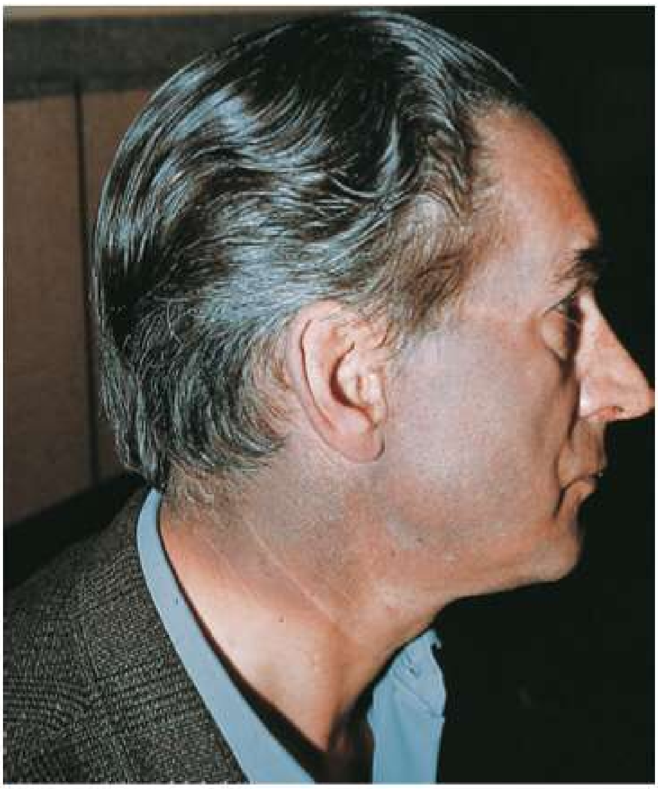


Fig. 3.4 Phenothiazine-induced pigmentation.

phenothiazine induced pigmentation striking abnormal coloration of the skin, particularly in areas exposed to light, due to drug metabolites of phenothiazines (slategrey)

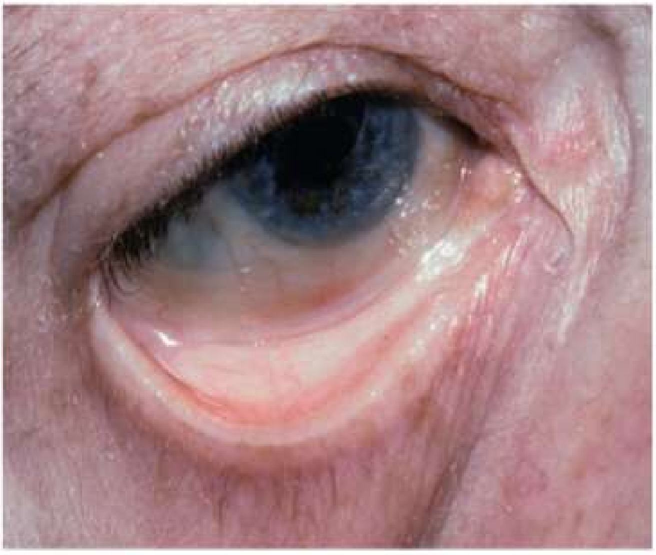


Fig. 3.5 Conjunctival pallor.

sign of anemia due to the reduction of amount of Hb central cynosis This is seen at the lips and tongue . It corresponds to an arterial oxygen saturation (SpO_2) of <90% and usually indicates underlying cardiac or pulmonary disease

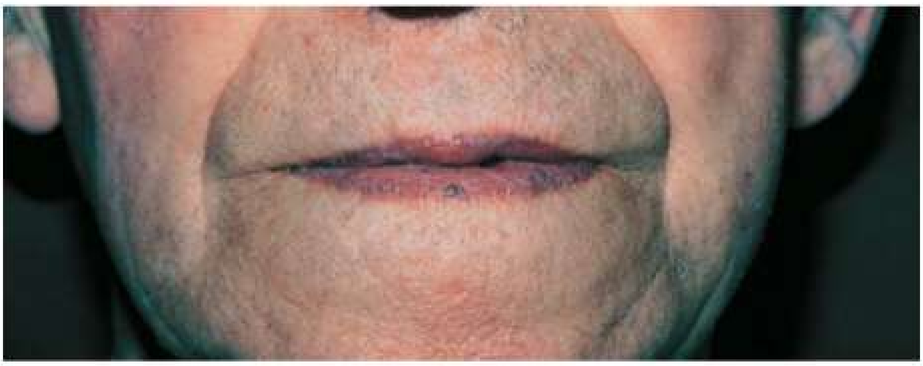


Fig. 3.6 Central cyanosis of the lips.

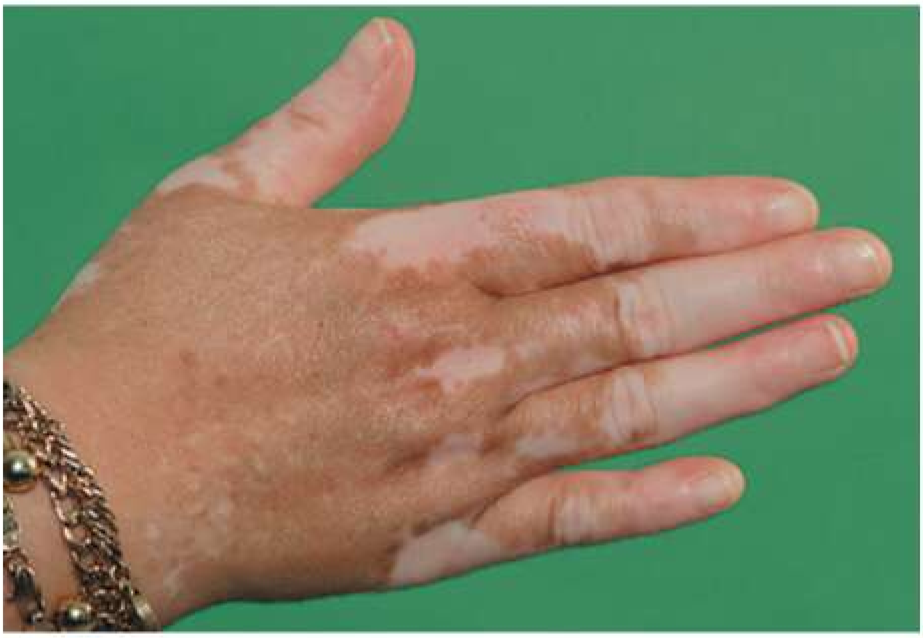


Fig. 3.7 Vitiligo.

bilateral symmetrical depigmentation, commonly of the face, neck and extensor aspects of the limbs, usually associated with autoimmune diseases such as Diabetes mellitus, pernicious anemia, adrenal disorders

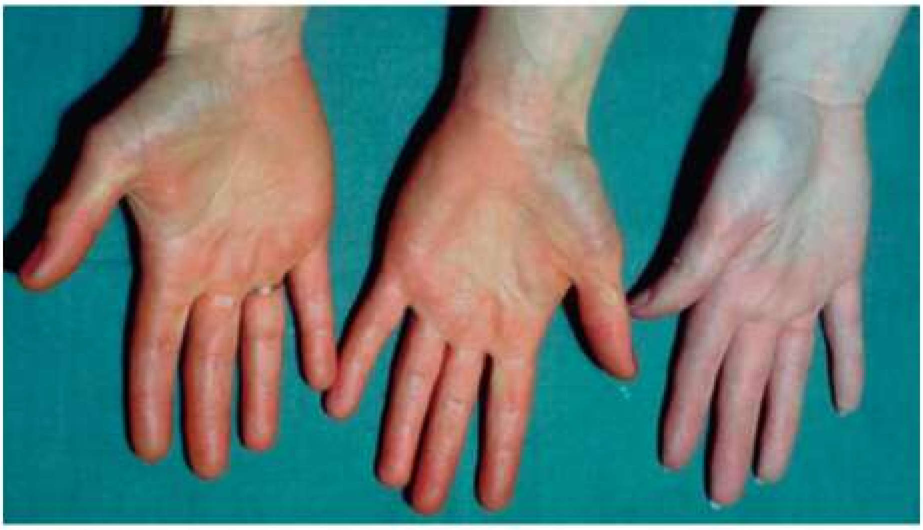


Fig. 3.8 Hypercarotenaemia.

Hypercarotenaemia :

A yellowish discoloration is seen on the face, palms and soles, but not the sclerae, and this distinguishes it from jaundice .

causes:

1) Eat large amounts of raw carrots and tomatoes 2) Hypothyroidism.

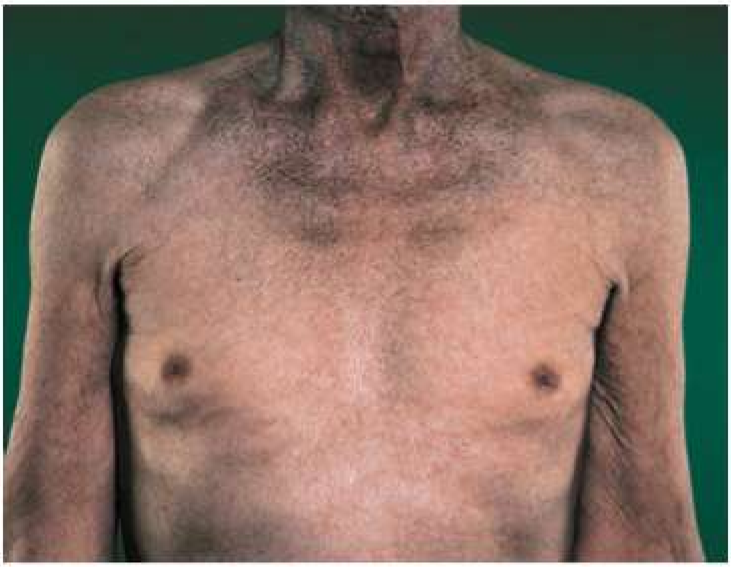


Fig. 3.9 Haemochromatosis with increased skin pigmentation.

Haemochromatosis increases skin pigmentation due to iron deposition and stimulation of melanocytes

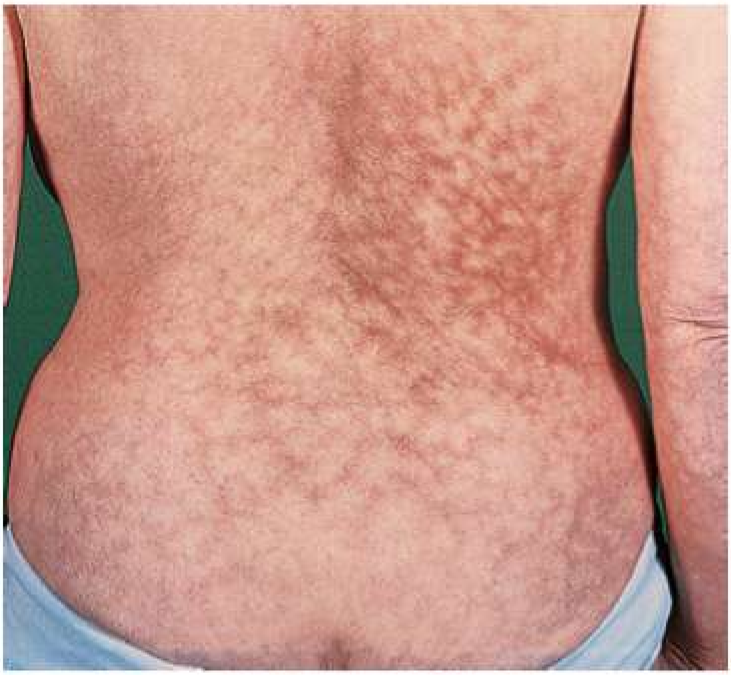


Fig. 3.10 Erythema ab igne.

Local deposition of haemosiderin (erythema ab igne or ‘granny’s tartan’) occurs with heat damage to the skin from sitting too close to a fire or from applying local heat, such as a hot water bottle, to the site of pain

Blue sclera of osteogenesis imperfecta (autosomal dominant) .the sclera are blue due to abnormal collagen formation

systemic sclerosis the skin is thickened and tight, causing loss of the normal wrinkles and skin folds, 'beaking' of the nose, and narrowing and puckering of the mouth

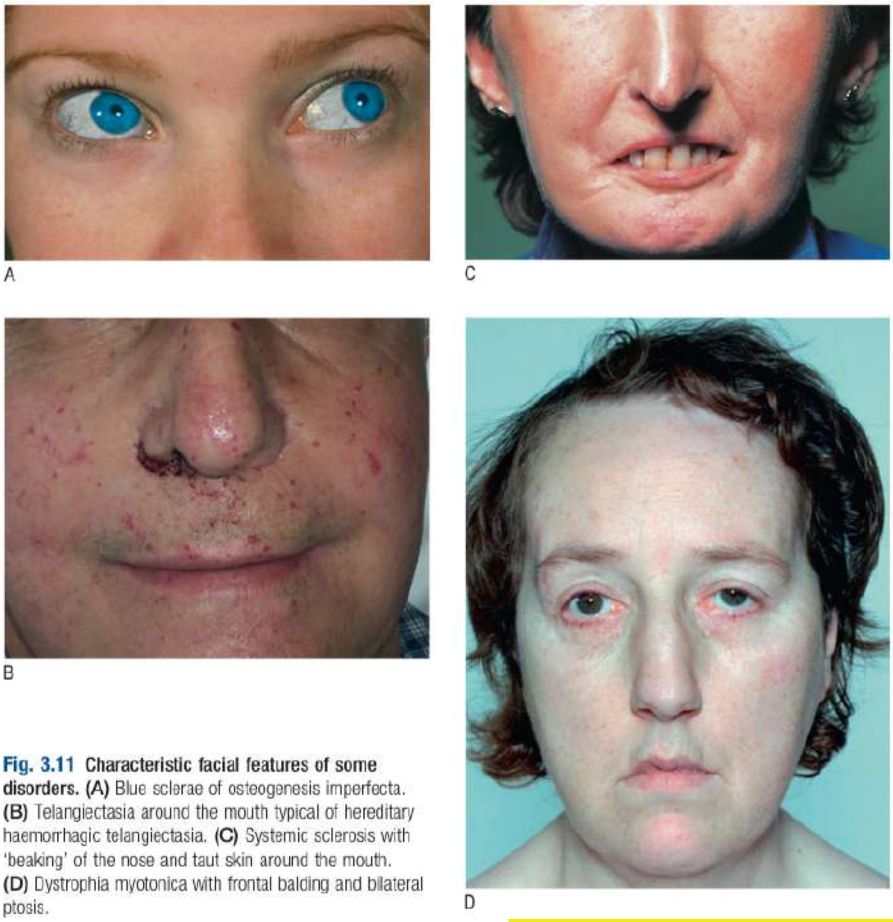


Fig. 3.11 Characteristic facial features of some disorders. (A) Blue sclerae of osteogenesis imperfecta. **(B)** Telangiectasia around the mouth typical of hereditary haemorrhagic telangiectasia. **(C)** Systemic sclerosis with 'beaking' of the nose and taut skin around the mouth. **(D)** Dystrophia myotonica with frontal balding and bilateral ptosis.

Hereditary haemorrhagic telangiectasia (autosomal dominant condition) associated with small dilated capillaries or terminal arteries (telangiectasia) on the lips and tongue.

Dystrophia myotonica (autosomal dominant condition) with characteristic features of frontal balding, bilateral ptosis and delayed relaxation of grip after a handshake.

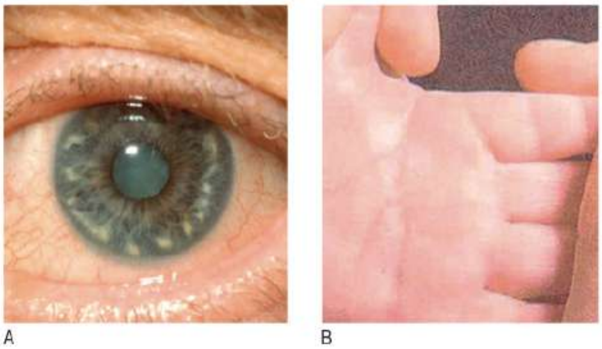
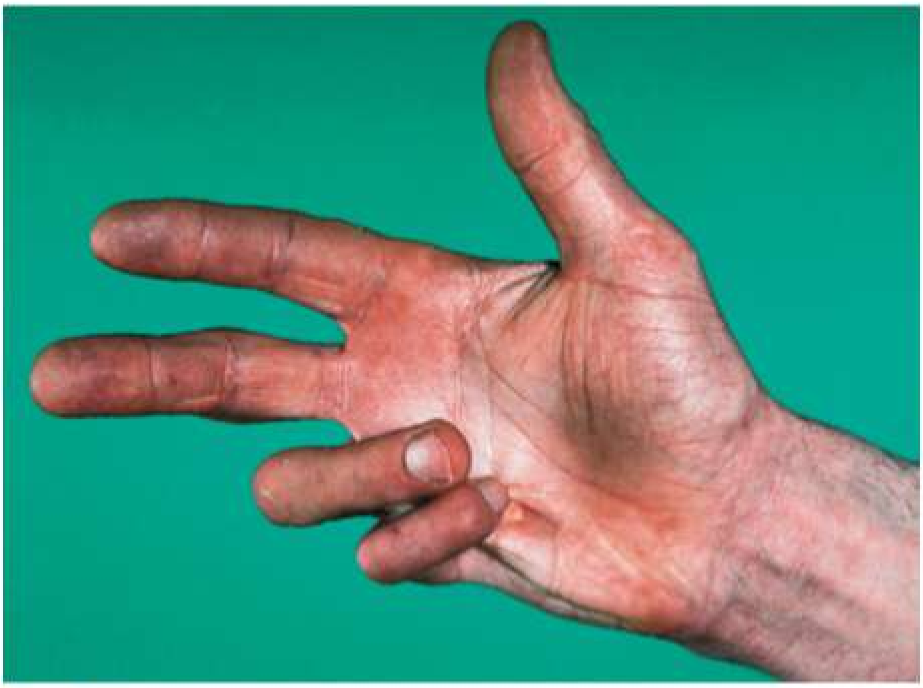


Fig. 3.12 Down's syndrome. (A) Brushfield's spots: grey-white areas of depigmentation in the iris. **(B)** Single palmar crease.

Greywhite areas of depigmentation are seen in the iris (Brushfield's spots) in down syndrom .
The hands are broad with a single palmar crease .the fingers are short and the little finger is curved.



Dupuytren’s contracture Is a thickening of the palmer fascia causing fixed flexion deformity and usually affecting the little and ring fingers

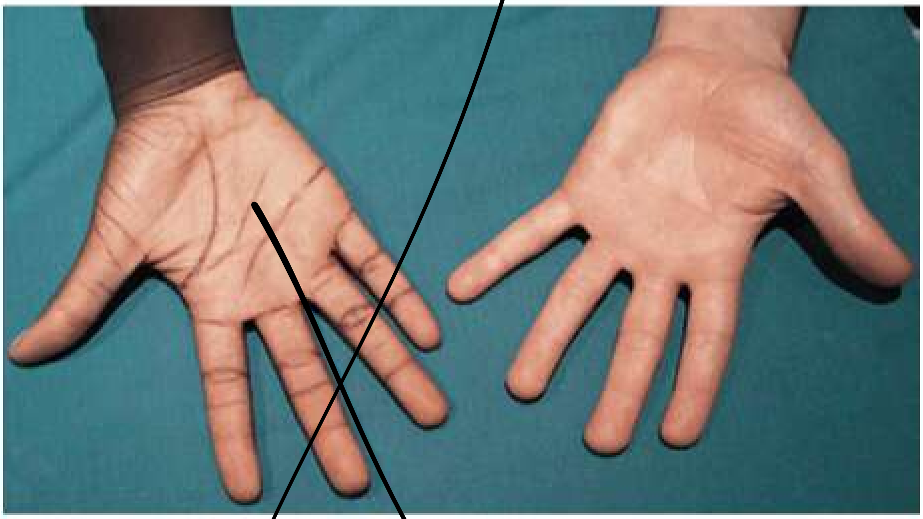


Fig. 3.14 **Normal palms.** African (left) and European (right).

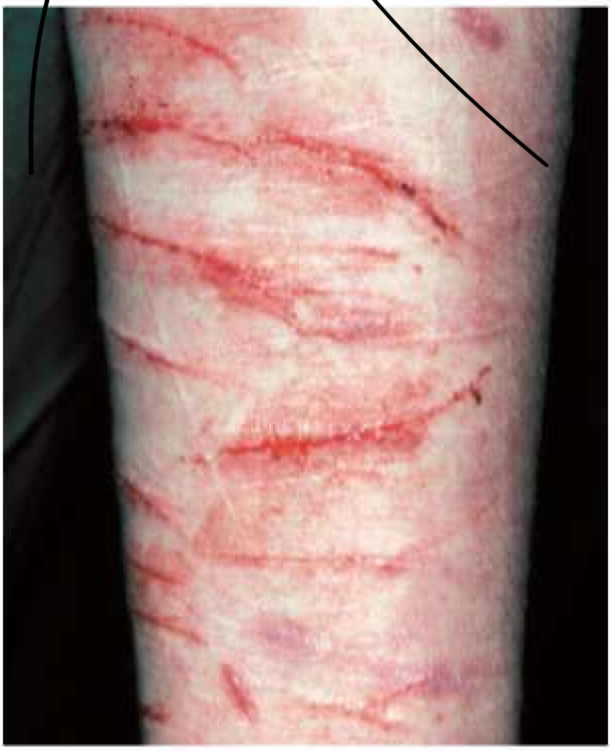


Fig. 3.15 Self-cutting.

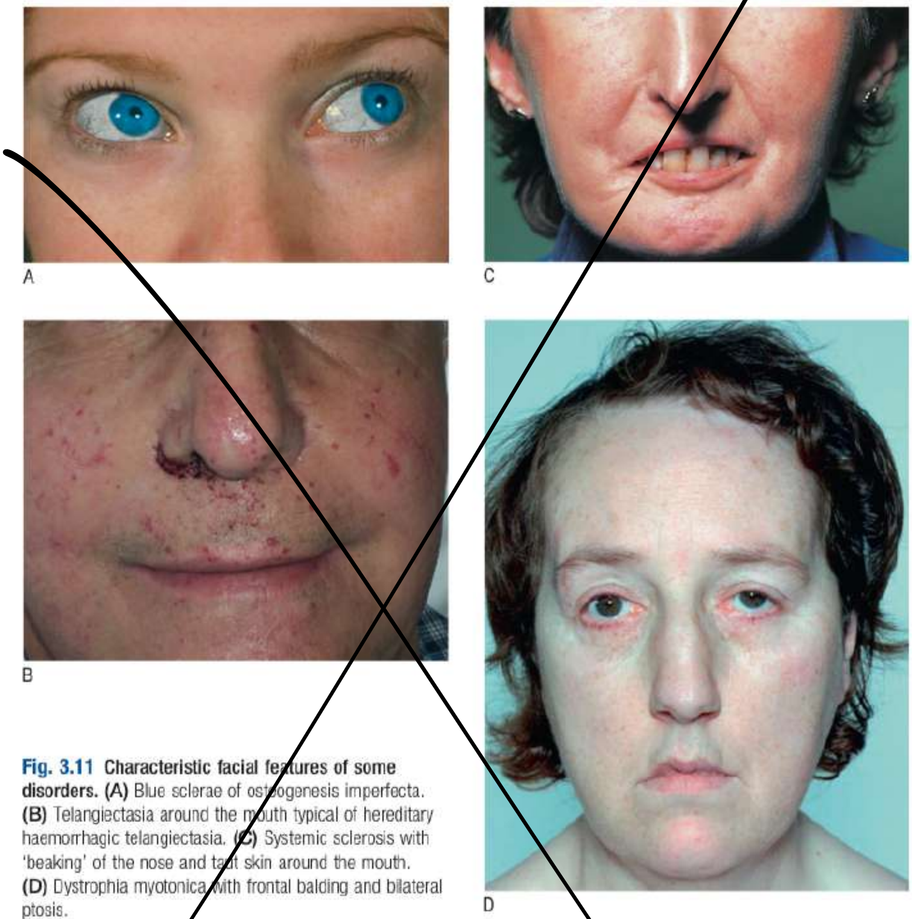


Fig. 3.11 Characteristic facial features of some disorders. **(A)** Blue sclerae of osteogenesis imperfecta. **(B)** Telangiectasia around the mouth typical of hereditary haemorrhagic telangiectasia. **(C)** Systemic sclerosis with 'beaking' of the nose and taut skin around the mouth. **(D)** Dystrophia myotonica with frontal balding and bilateral ptosis.

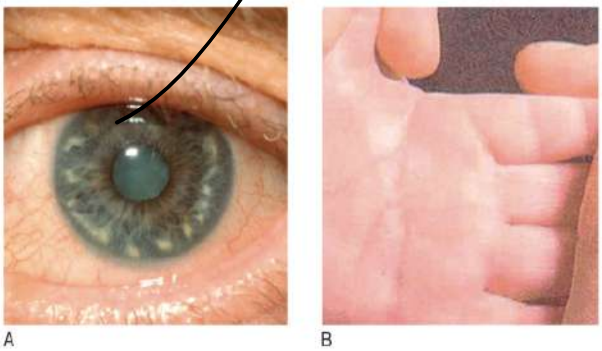


Fig. 3.12 Down's syndrome. **(A)** Brushfield's spots: grey-white areas of depigmentation in the iris. **(B)** Single palmar crease.

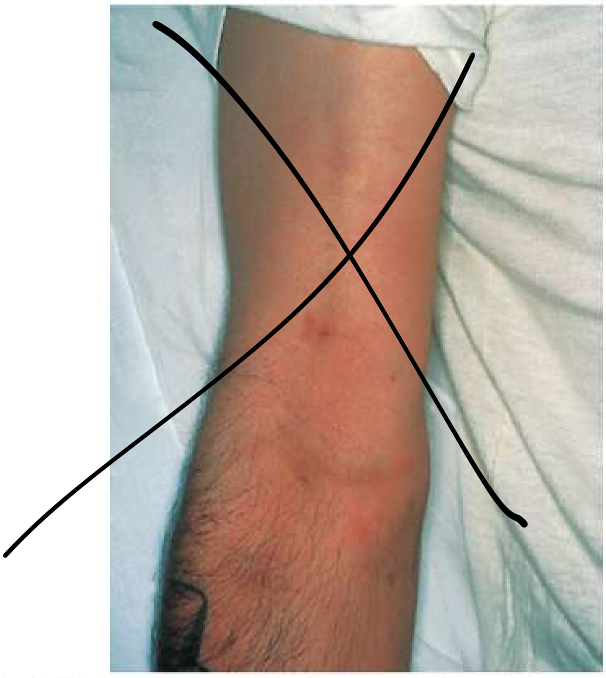


Fig. 3.16 The linear marks of intravenous injection at the right elbow.

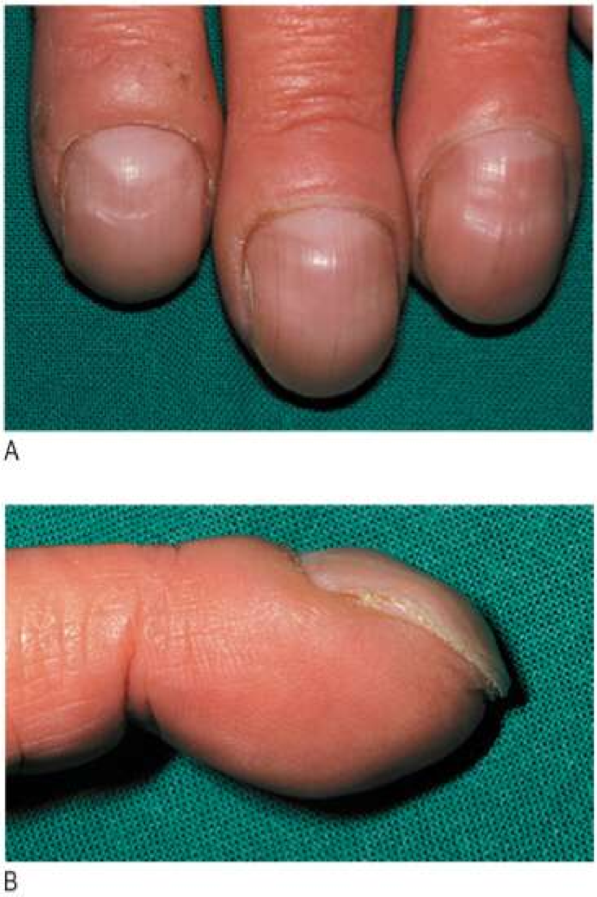


Fig. 3.17 Clubbing. (A) Anterior view. (B) Lateral view.

Clubbing is painless softtissue swelling of the terminal phalanges. The enlargement increases convexity of the nail.

3.10 Causes of clubbing

Congenital or familial (5–10%)

Acquired

Thoracic (~70%)
- Lung cancer
- Chronic suppurative conditions
  - Bronchiectasis
  - Lung abscess
  - Empyema
  - Cystic fibrosis
- Mesothelioma
- Fibroma
- Pulmonary fibrosis

Cardiovascular
- Cyanotic congenital heart disease
- Infective endocarditis
- Arteriovenous shunts and aneurysms

Gastrointestinal
- Cirrhosis
- Inflammatory bowel disease
- Coeliac disease

Others
- Thyrotoxicosis (thyroid acropatchy)

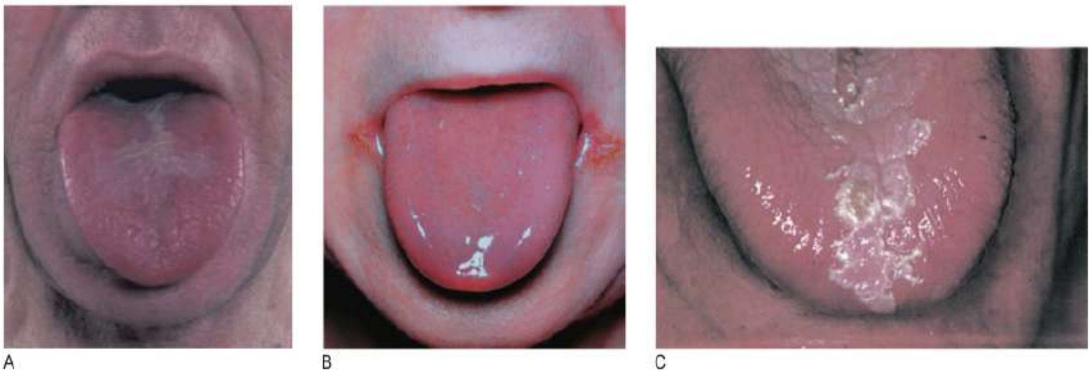


Fig. 3.19 **The tongue as a diagnostic aid.** **(A)** Large tongue (macroglossia) of acromegaly. **(B)** Smooth red tongue and angular stomatitis of iron deficiency. **(C)** Leukoplakia.

Macroglossia (enlargement of the tongue) may occur in acromegaly, amyloidosis or tumor infiltration

Smooth red tongue and angular stomatitis of iron deficiency

Leukoplakia is a thickened white patch that cannot be scraped off the tongue. It may be premalignant

Neurofibromatosis llll Multiple lumps may occur in neurofibromatosis, skin metastases, lipomatosis and lymphomas

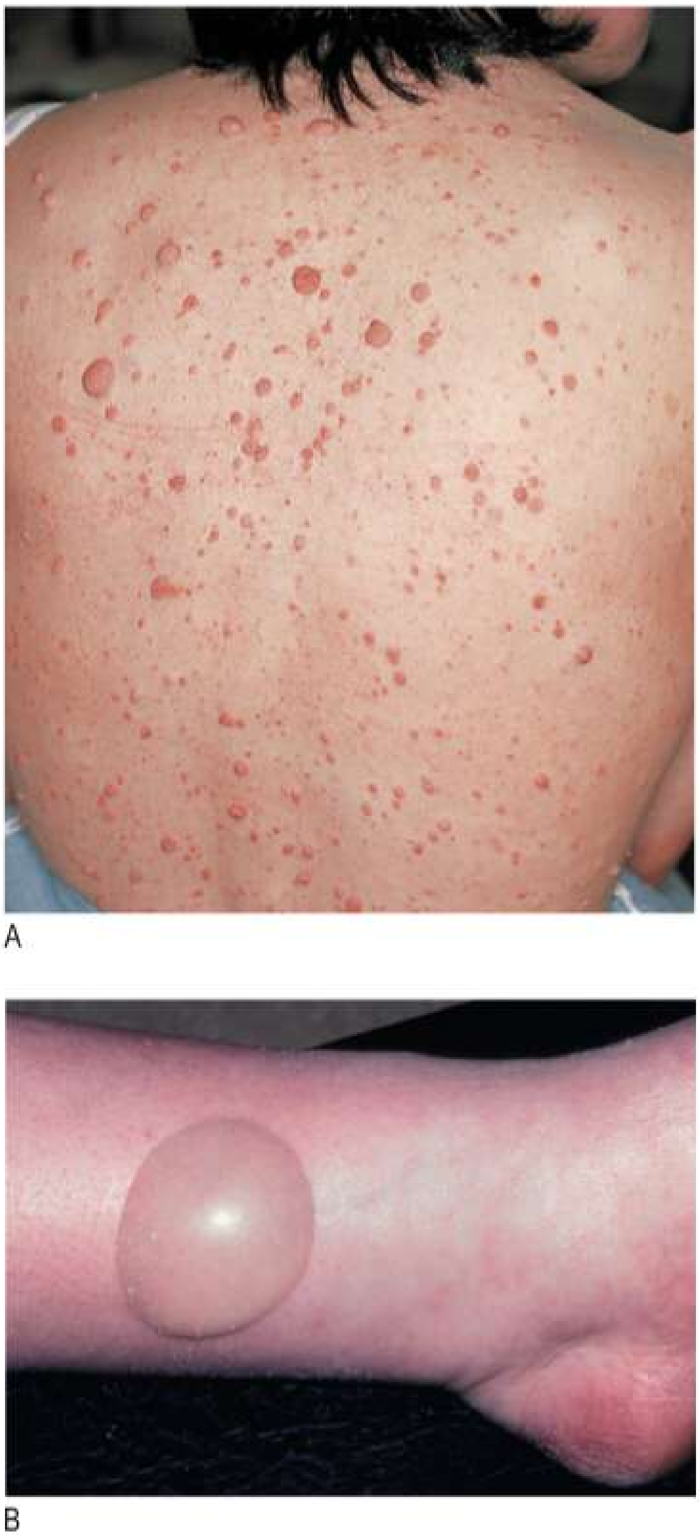


Fig. 3.20 **Lumps and swellings. (A)** Neurofibromatosis. **(B)** Blister on leg.

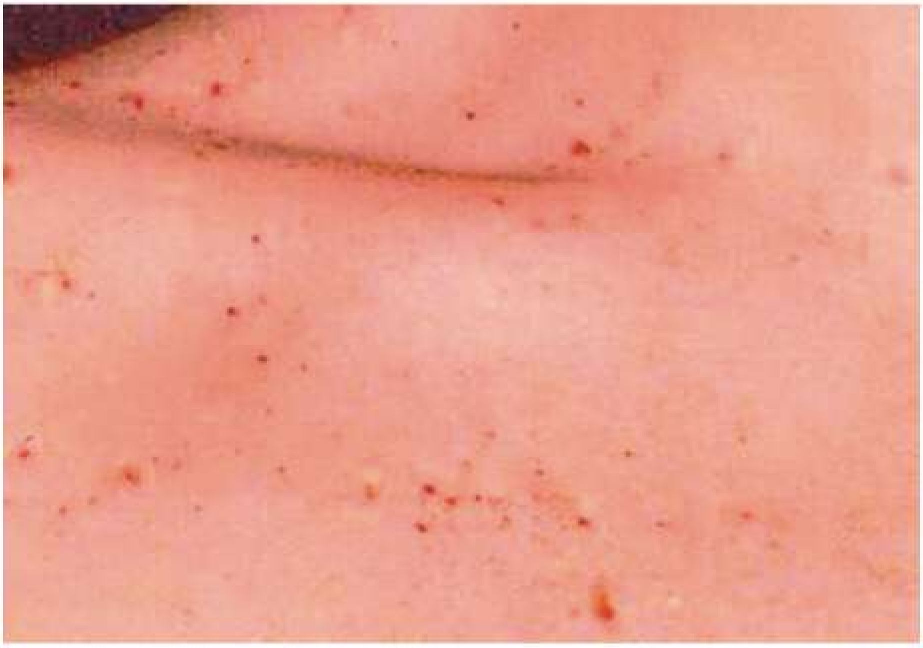


Fig. 3.24 Petechiae.

Petechiae may due to enlargement of the liver and spleen and for other hematological Features such as pinpoint

Scurvy (Bleeding Gums) due to Vitamin C deficiency
Bruising and perifollicular hemorrhages due to Vitamin C deficiency

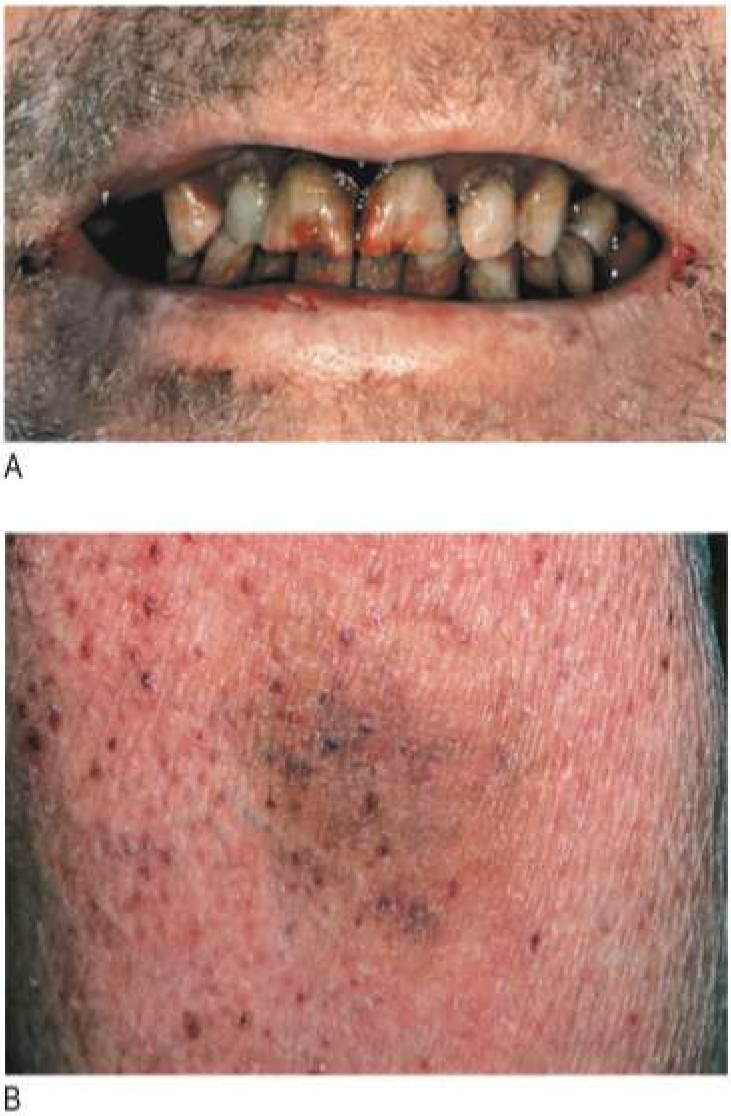


Fig. 3.26 **Scurvy.** **(A)** Bleeding gums. **(B)** Bruising and perifollicular haemorrhages.

Marfan’s syndrome, the limbs are long in relation to the length of the trunk, and the arm span exceeds height

Marfan’s syndrome high arched palate

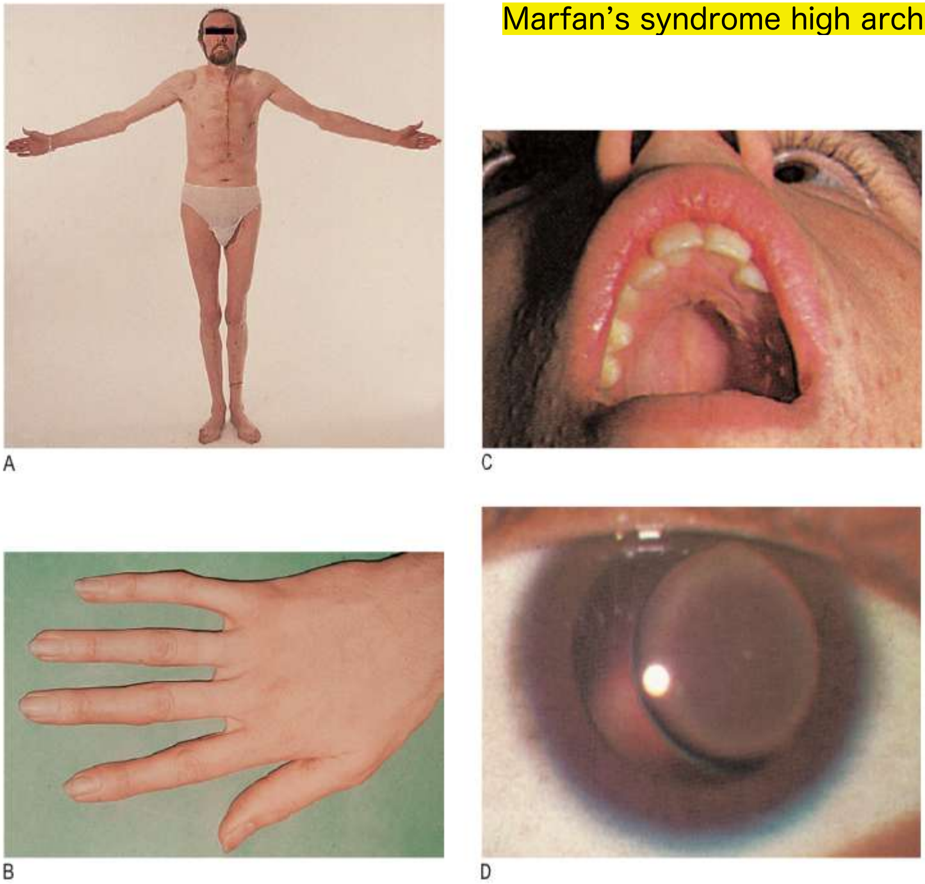
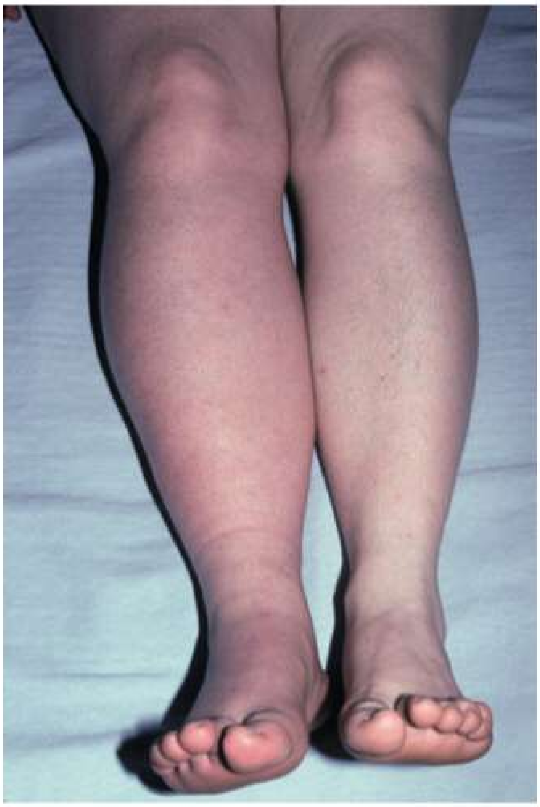


Fig. 3.28 Marfan’s syndrome, an autosomal dominant condition. (A) Tall stature and reduced upper segment to lower segment ratio (note surgery for aortic dissection). **(B)** Long fingers. **(C)** High-arched palate. **(D)** Dislocation of the lens in the eye.

long slender fingers (arachnodactyly)



sowellen right led (localised odema due to venous obstruction Increased venous pressure increases hydrostatic pressure within capillaries, producing oedema in the area drained by that vein) Venous causes include deep vein thrombosis, external pressure from a tumour.

Fig. 3.30 Swollen right leg, suggesting deep vein thrombosis or inflammation, e.g. soft-tissue infection or ruptured Baker's cyst.

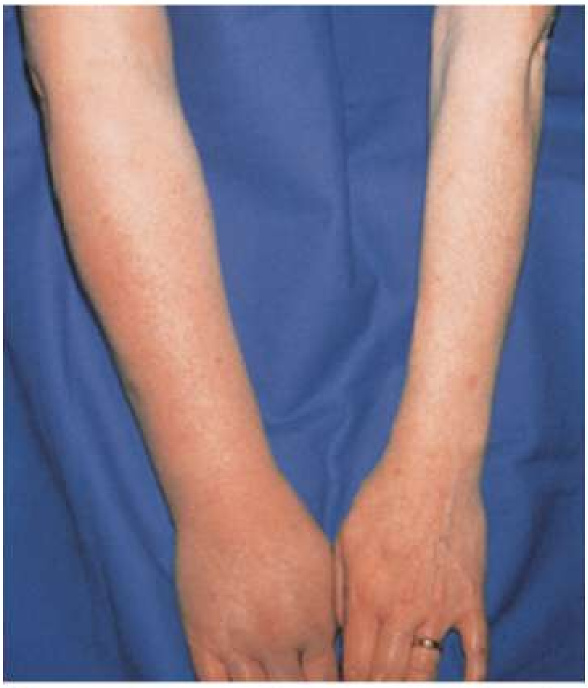


Fig. 3.31 Lymphoedema of the right arm following right-sided mastectomy and radiotherapy.

lymphoedema Localised oedema due to lymphatic cause (Intraluminal or extraluminal obstruction)

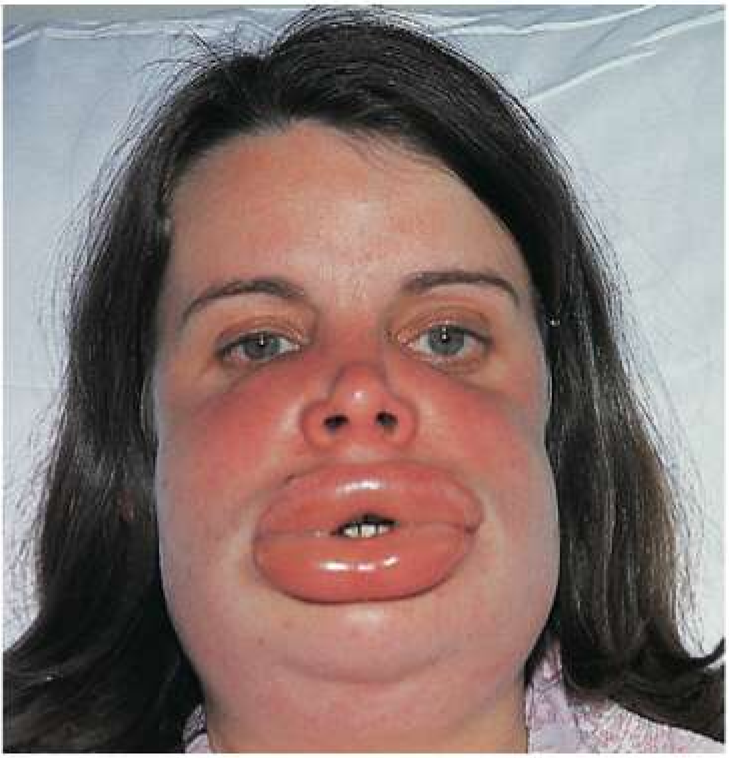


Fig. 3.32 Angio-oedema following a wasp sting.

Angiooedema due to specific form of allergic oedema affecting the face, lips and mouth

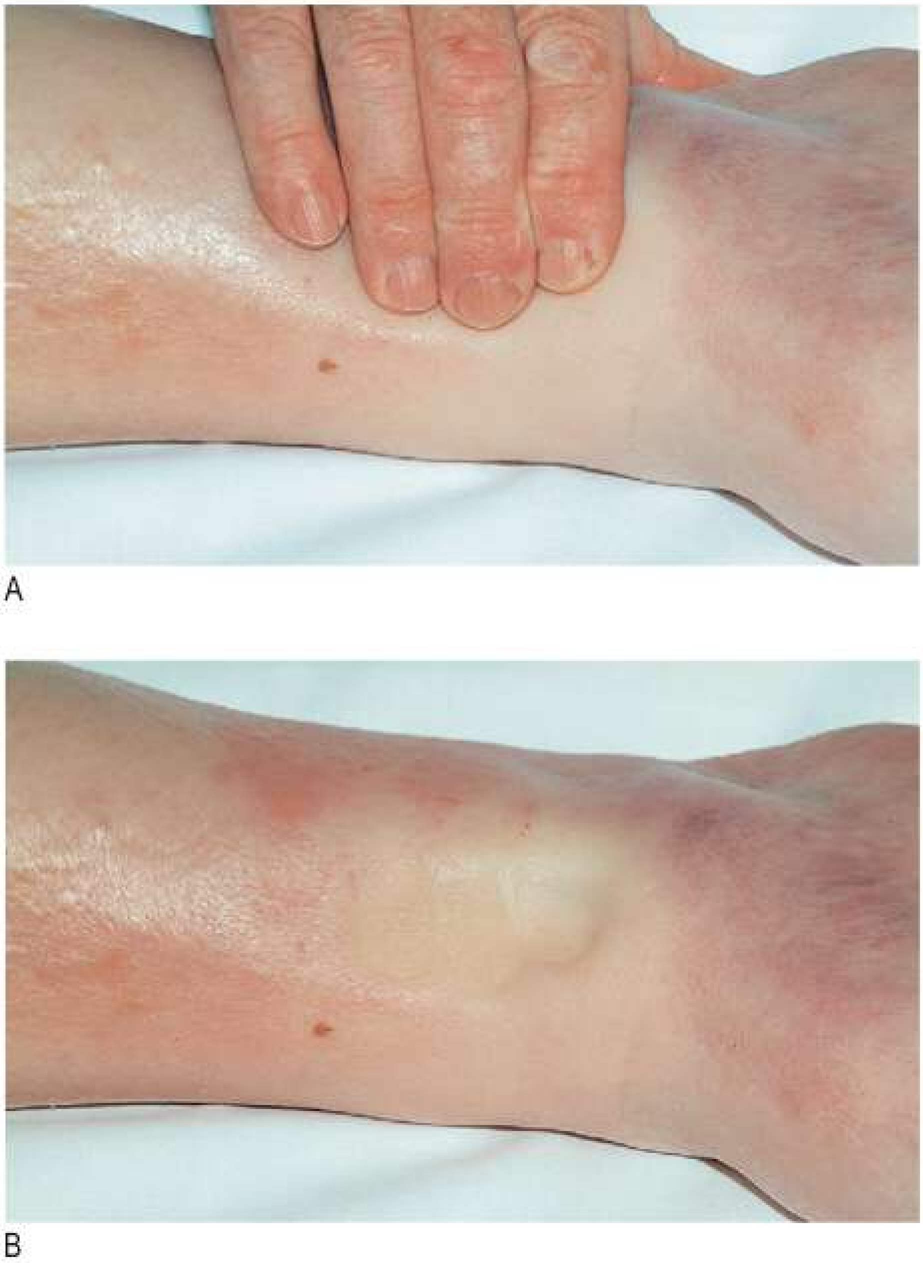


Fig. 3.33 Demonstration of pitting oedema.

pitting oedema due to failure of muscle movement and is common in the lower limbs of inactive patients. pitting oedema which notice when apply firm pressure with your fingers or thumb for at least 15 seconds

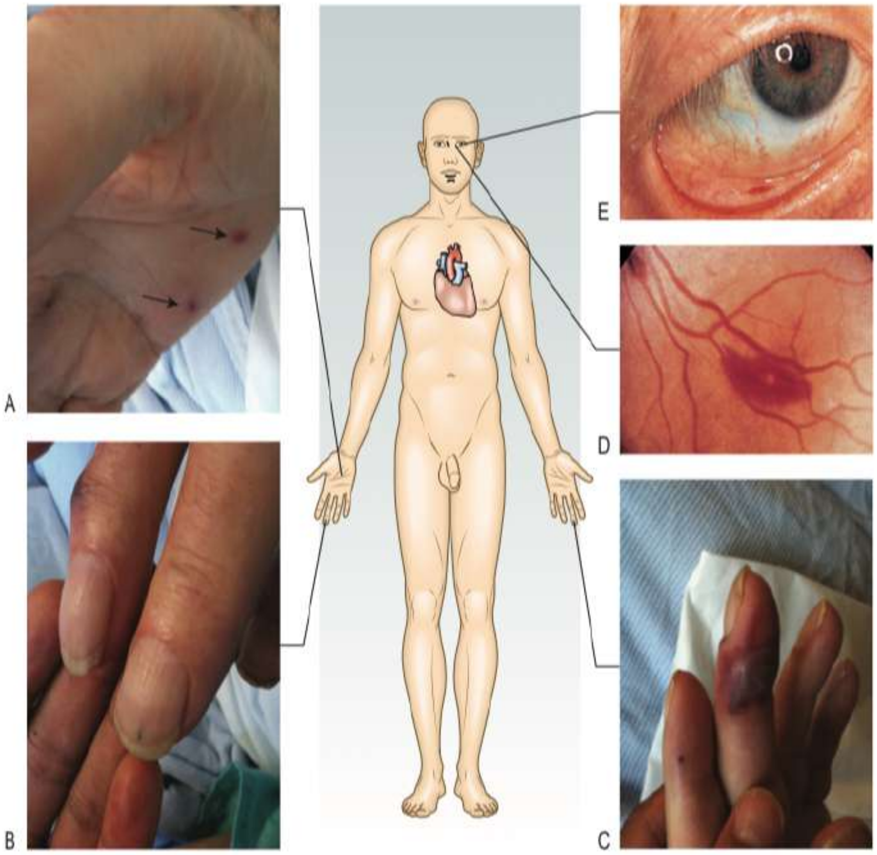
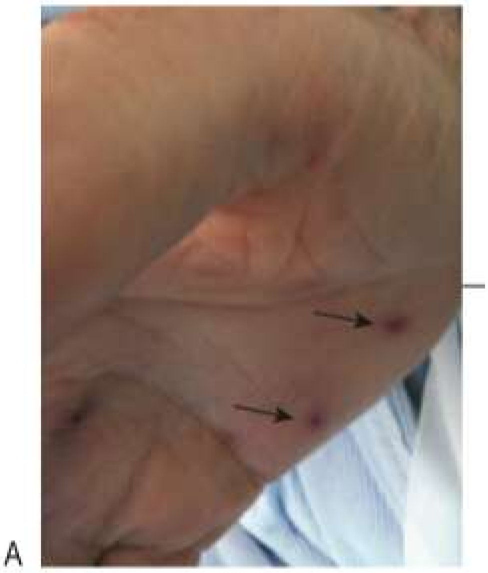
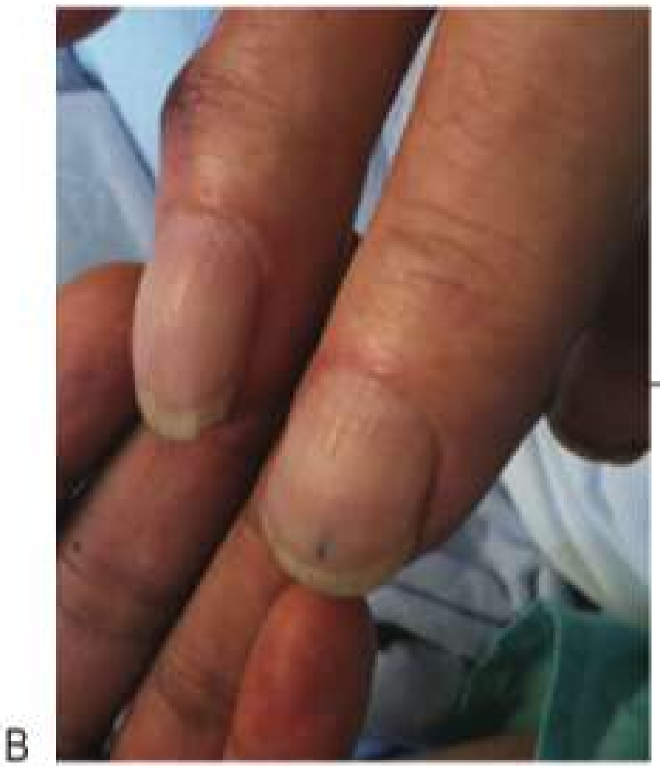


Fig. 6.6 **Clinical features which may be present in infective endocarditis: (A)** Janeway lesions on hypothenar eminence (arrows), **(B)** Splinter haemorrhages, **(C)** Osler's nodes, **(D)** Roth's spot on fundoscopy, **(E)** Petechial haemorrhages on conjunctiva.



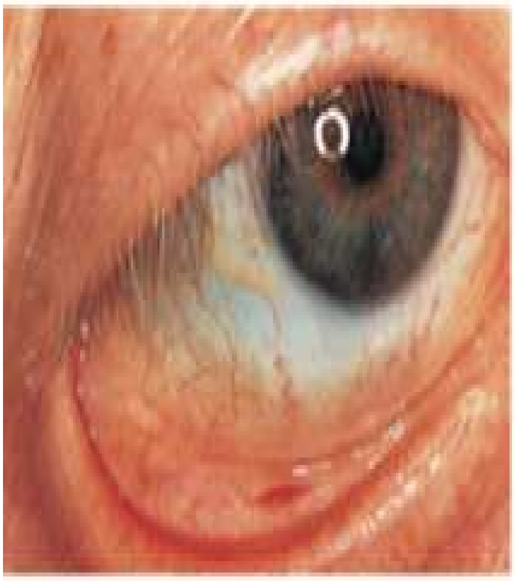
Clinical Features which may be presented in infective endocarditis

Janeway lesions on hypothenar eminence, it is uncommon Feature of infective endocarditis



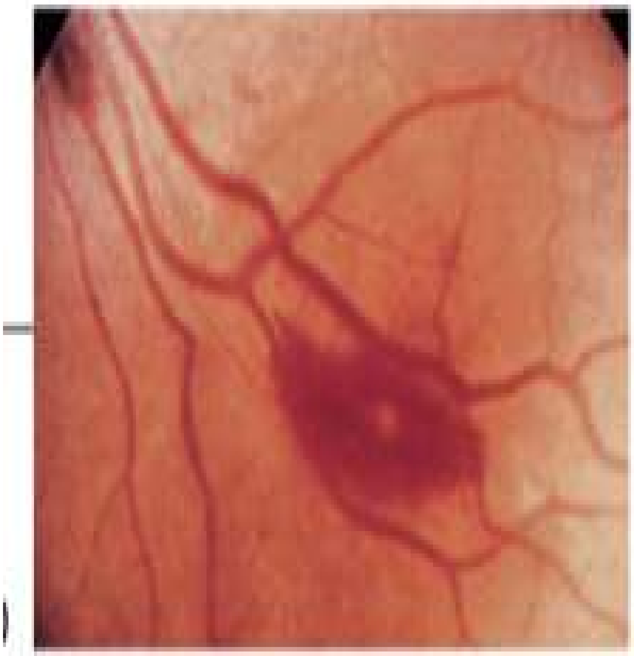
Clinical Features which may be presented in infective endocarditis

Splinter hemorrhages are found in infective endocarditis and some vasculitic disorders



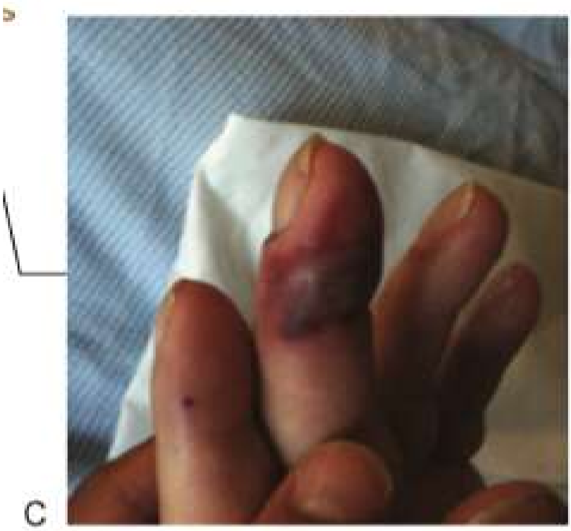
Clinical features which may be presented in infective endocarditis

Petechial hemorrhages on conjunctiva = A petechial rash (caused by vasculitis), most often present on the legs and conjunctivae



Clinical features which may be presented in infective endocarditis

Roth’s spot on Fundoscopy Can occur in anemia or leukaemia



Clinical features which may be presented in infective endocarditis

Osler’s nodes = Uncommon feature of infective endocarditis

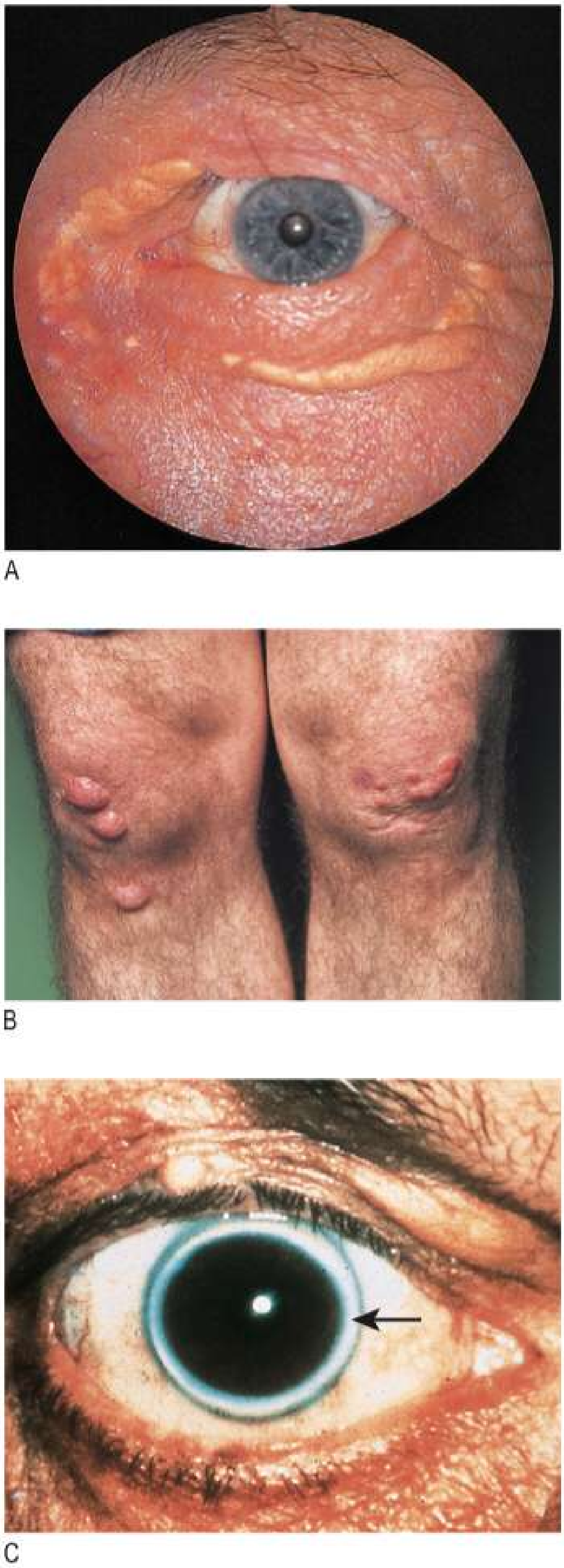
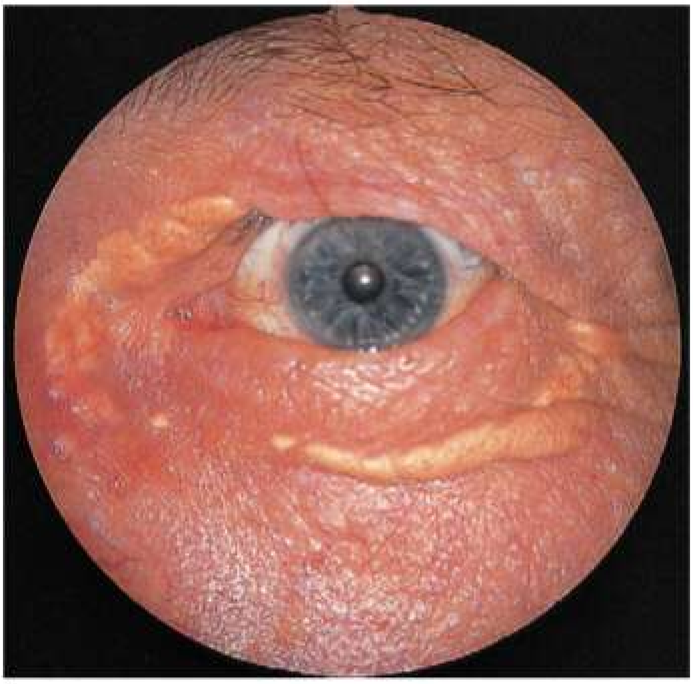
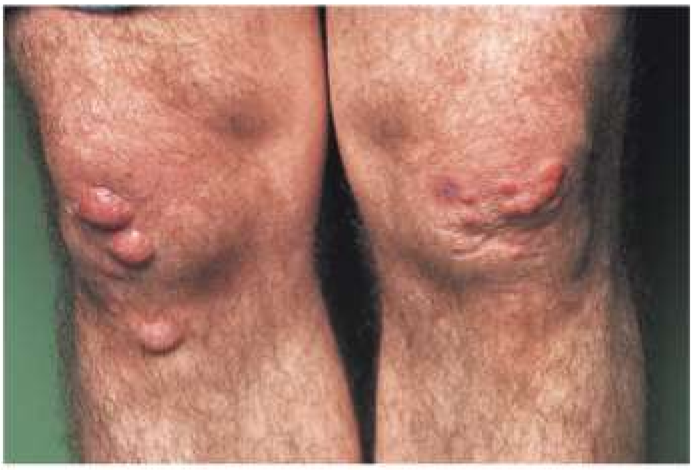


Fig. 6.8 **Features of hyperlipidaemia.** **(A)** Xanthelasma. **(B)** Skin xanthomata over knees. **(C)** Corneal arcus (arrow).



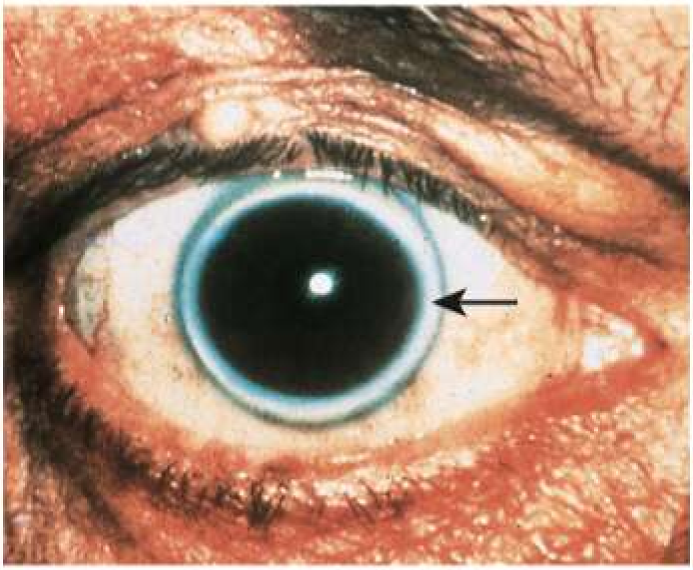
Features of hyperlipidemia =Xanthelasma

Xanthelasma are an important predictor of cardiovascular disease



Features of hyperlipidemia Skin xanthoma on the knees →

Xanthoma are an important predictor of cardiovascular disease, check the patellar and Achilles tendons for xanthomata



C

Features of hyperlipidemia = Corneal arcus

Corneal arcus is a creamy yellow discoloration at the boundary of the iris and cornea caused by cholesterol deposition. It is more common in men and black patient

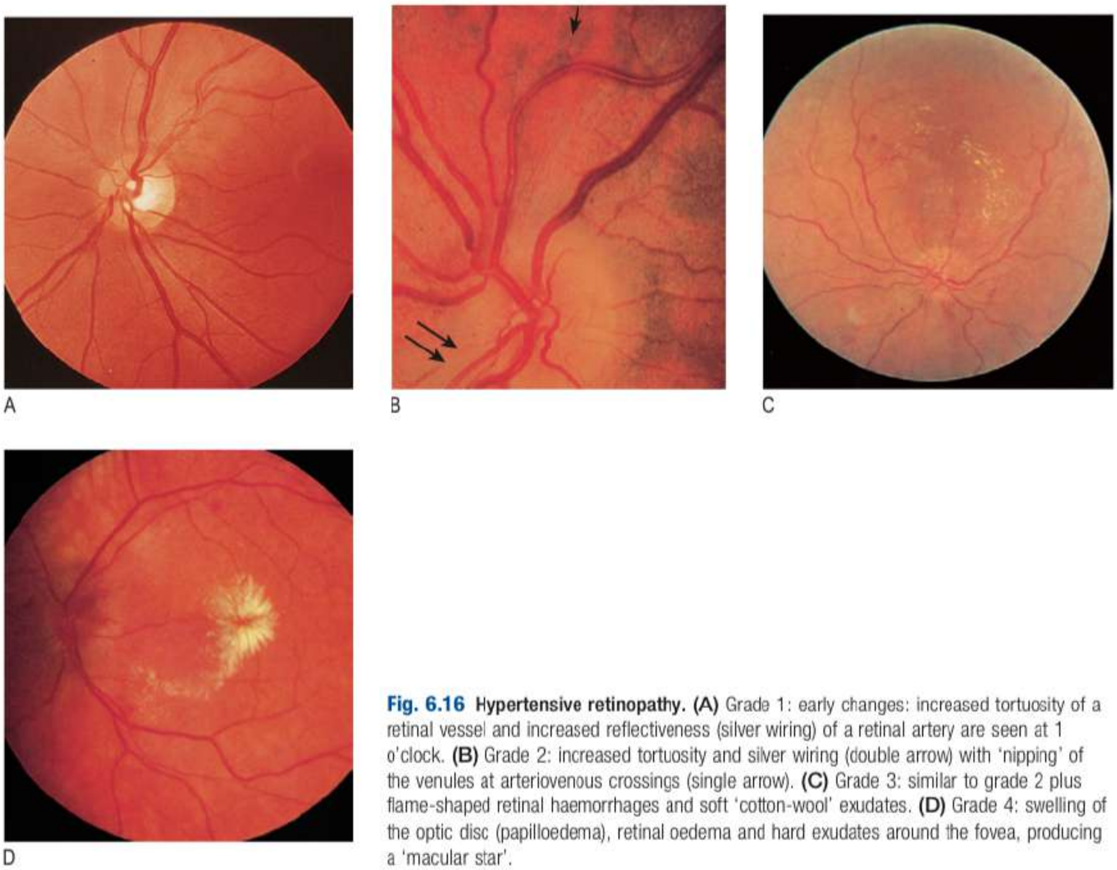


Fig. 6.16 Hypertensive retinopathy. (A) Grade 1: early changes: increased tortuosity of a retinal vessel and increased reflectiveness (silver wiring) of a retinal artery are seen at 1 o'clock. **(B)** Grade 2: increased tortuosity and silver wiring (double arrow) with 'nipping' of the venules at arteriovenous crossings (single arrow). **(C)** Grade 3: similar to grade 2 plus flame-shaped retinal haemorrhages and soft 'cotton-wool' exudates. **(D)** Grade 4: swelling of the optic disc (papilloedema), retinal oedema and hard exudates around the fovea, producing a 'macular star'.

Gangrene of foot (Acute Limb ischemia)

Large patches of fixed staining lead to blistering and liquefaction, Fixed mottling of an anesthetic, paralyzed limb, with muscle rigidity and turgor, indicates irreversible ischemia; amputation or end-of-life care is the only option

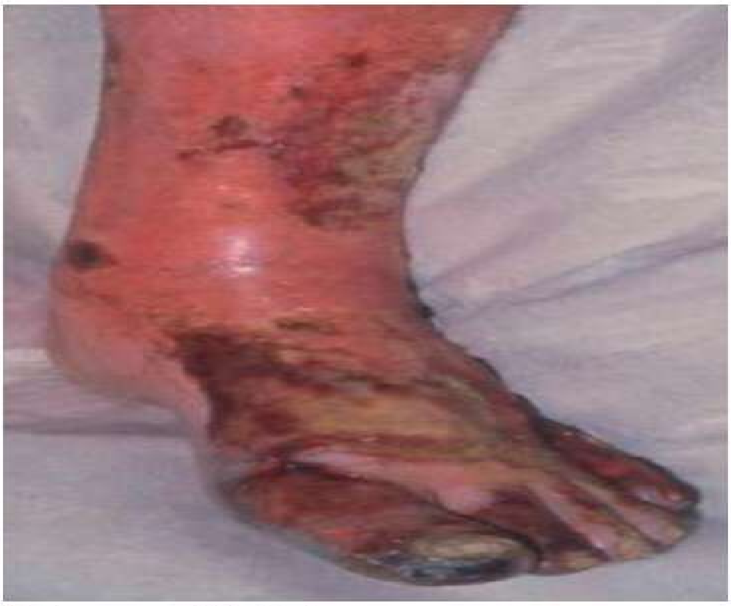
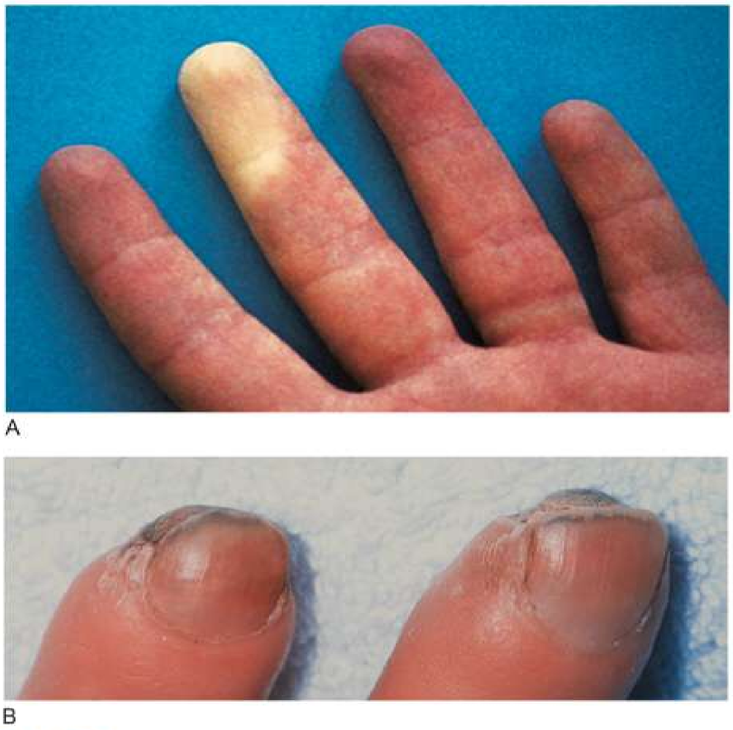


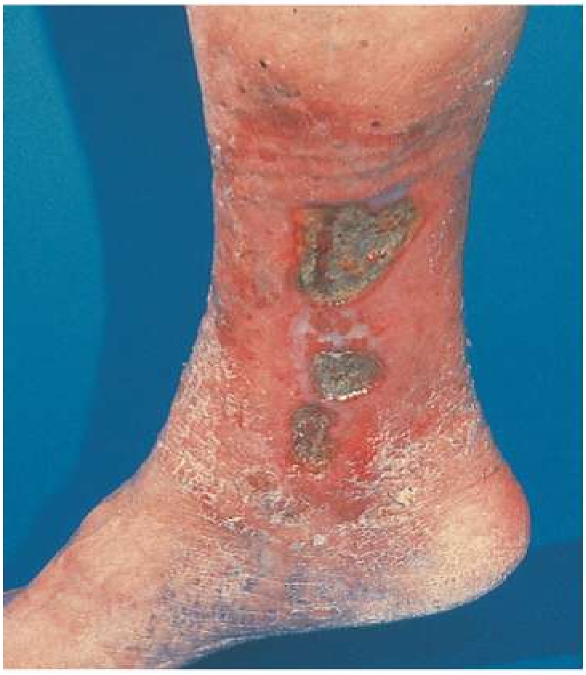
Fig. 6.36 Gangrene of the foot.

The acute phase, showing severe blanching of the tip of one finger



Primary Raynaud's syndrome occasionally progresses to fingertip ulceration or even gangrene

Fig. 6.38 **Raynaud's syndrome. (A)** The acute phase, showing severe blanching of the tip of one finger. **(B)** Primary Raynaud's syndrome occasionally progresses to fingertip ulceration or even gangrene.



g. 6.42 Venous ulceration.

Venous ulceration

Chronic venous ulceration usually affects the medial aspect, is shallow; is pink (granulation tissue) or yellow/ green (slough); has an irregular margin; and is always associated with other skin changes of chronic venous insufficiency (varicose eczema, lipodermatosclerosis)

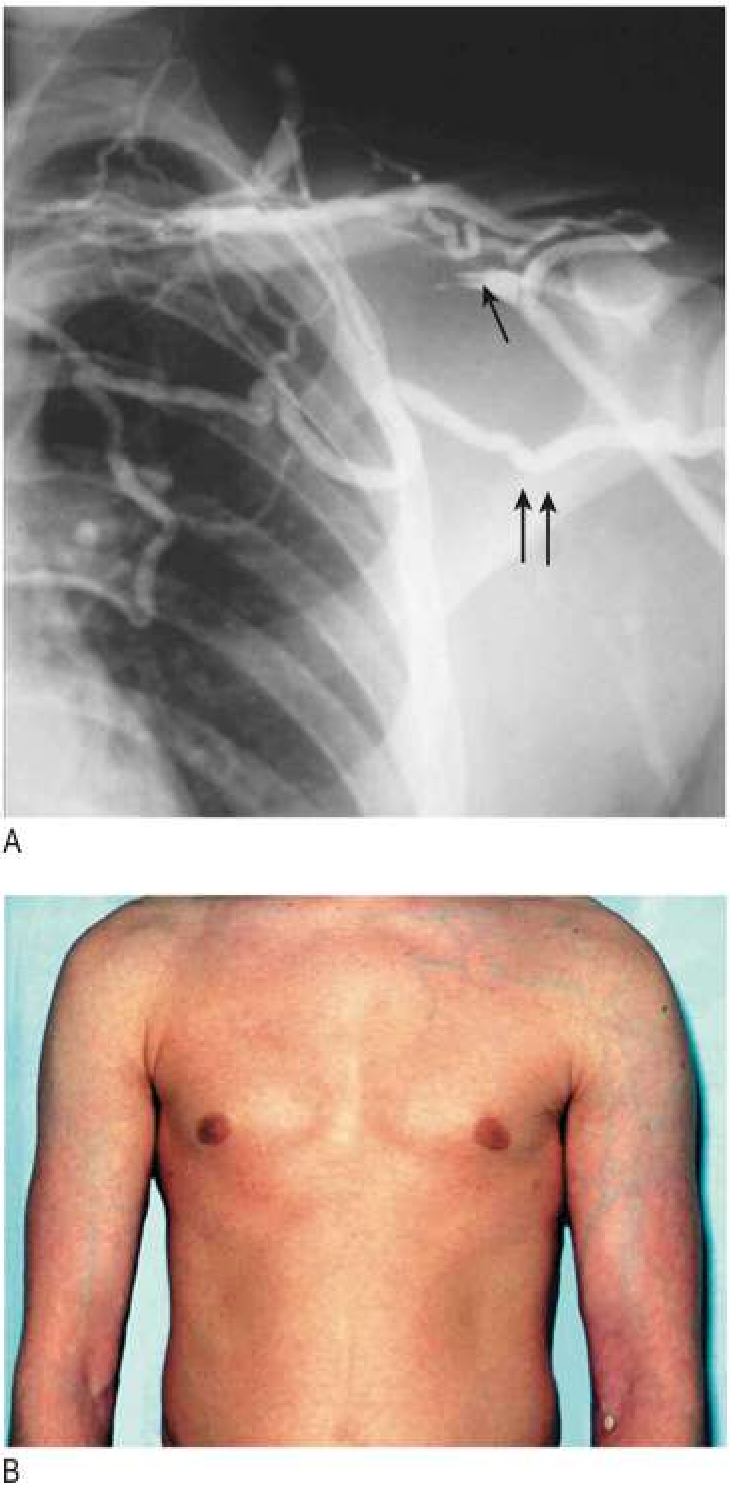
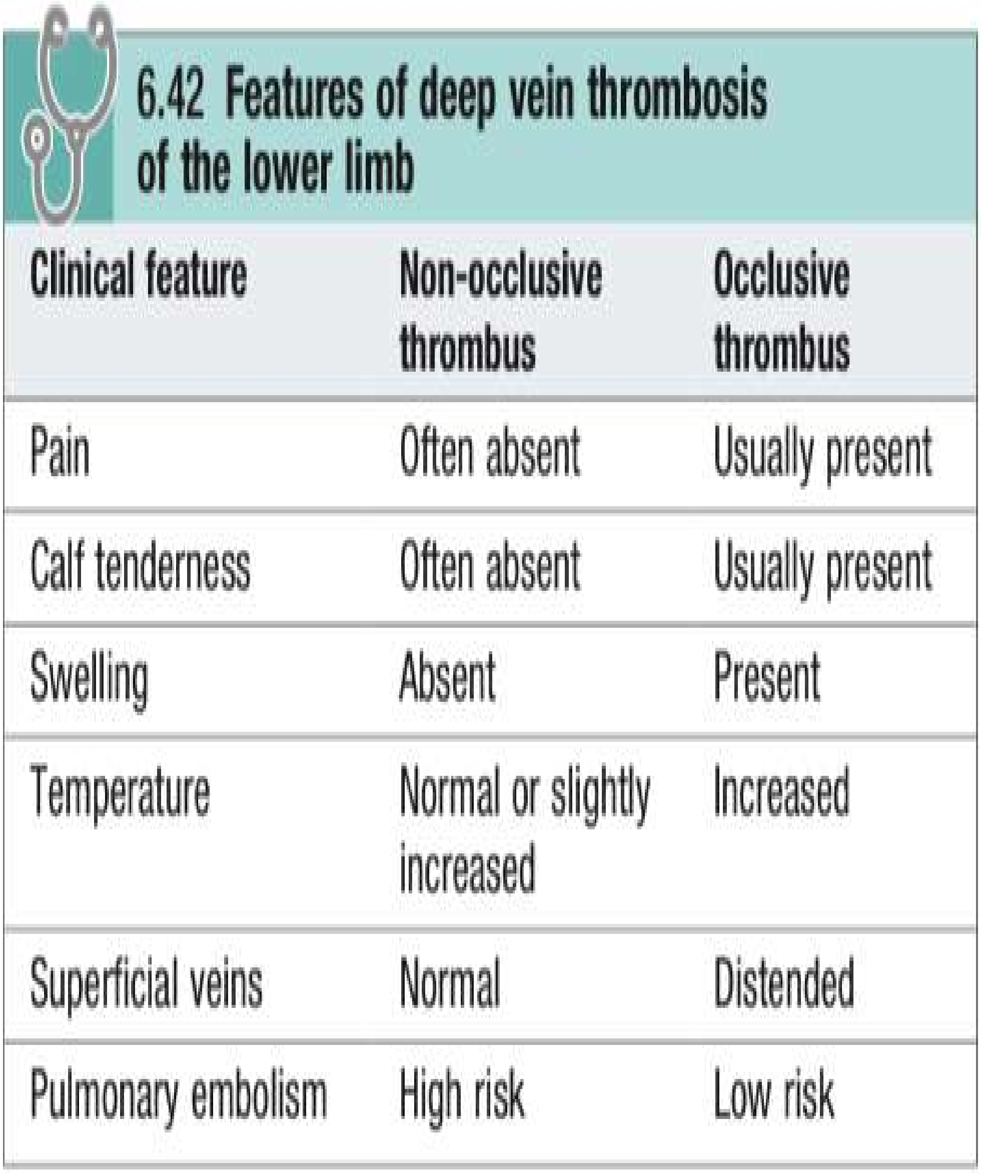


Fig. 6.43 **Axillary vein thrombosis. (A)** Angiogram. Single arrow shows site of thrombosis. Double arrows show dilated collateral vessels. **(B)** Clinical appearance with swollen left arm and dilated superficial veins.

Axillary vein thrombosis

e arm is swollen and the skin is cyanosed and mottled, especially when dependent Look for superficial distended veins (acting as collaterals) in the upper arm, over the shoulder region and on the anterior chest wall



6.42 Features of deep vein thrombosis of the lower limb

Clinical feature	Non-occlusive thrombus	Occlusive thrombus
Pain	Often absent	Usually present
Calf tenderness	Often absent	Usually present
Swelling	Absent	Present
Temperature	Normal or slightly increased	Increased
Superficial veins	Normal	Distended
Pulmonary embolism	High risk	Low risk

6.16 Causes of an irregular pulse

- Sinus arrhythmia
- Atrial extrasystoles
- Ventricular extrasystoles
- Atrial fibrillation
- Atrial flutter with variable response
- Second-degree heart block with variable response

6.17 Common causes of atrial fibrillation

- Hypertension
- Heart failure
- Myocardial infarction
- Thyrotoxicosis
- Alcohol-related heart disease
- Mitral valve disease
- Infection, e.g. respiratory, urinary
- Following surgery, especially cardiothoracic surgery

6.18 Causes of increased pulse volume

Physiological

- Exercise
- Pregnancy
- Advanced age
- Increased environmental temperature

Pathological

- Peripheral vascular disease
- Hypertension
- Fever
- Thyrotoxicosis
- Anaemia
- Aortic regurgitation
- Paget's disease of bone
- Peripheral atrioventricular shunt

6.39 Signs suggesting vascular disease

Sign	Implication
Hands and arms	
Tobacco stains	Smoking
Purple discoloration of the fingertips	Atheroembolism from a proximal subclavian aneurysm
Pits and healed scars in the finger pulps	Secondary Raynaud's syndrome
Calcinosis and visible nailfold capillary loops	Systemic sclerosis and CREST (calcinosis, Raynaud's phenomenon, oesophageal dysfunction, sclerodactyly, telangiectasia)
Wasting of the small muscles of the hand	Thoracic outlet syndrome
Face and neck	
Corneal arcus and xanthelasma	Hypercholesterolaemia
Horner's syndrome	Carotid artery dissection or aneurysm
Hoarseness of the voice and 'bovine' cough	Recurrent laryngeal nerve palsy from a thoracic aortic aneurysm
Prominent veins in the neck, shoulder and anterior chest	Axillary/subclavian vein occlusion
Abdomen	
Epigastric/umbilical pulsation	Aortoiliac aneurysm
Mottling of the abdomen	Ruptured abdominal aortic aneurysm or saddle embolism occluding aortic bifurcation
Evidence of weight loss	Visceral ischaemia

6.38 Diseases associated with secondary Raynaud's syndrome

- Connective tissue syndromes, e.g. systemic sclerosis, CREST (calcinosis, Raynaud's phenomenon, oesophageal dysfunction, sclerodactyly, telangiectasia) and systemic lupus erythematosus
- Atherosclerosis/embolism from proximal source, e.g. subclavian artery aneurysm
- Drug-related, e.g. nicotine, beta-blockers, ergot
- Thoracic outlet syndrome
- Malignancy
- Hyperviscosity syndromes, e.g. Waldenström's macroglobulinaemia, polycythaemia
- Vibration-induced disorders (power tools)
- Cold agglutinin disorders

EBE 6.12 Risk predictors of cardiovascular disease

The presence of xanthelasma predicts risk of myocardial infarction, coronary heart disease and death in the general population independently of well-known cardiovascular risk factors such as plasma cholesterol and triglyceride concentrations. Corneal arcus, however, is not an independent risk factor.

6.7 Symptoms related to medication

Symptom	Medication
Dyspnoea	Beta-blockers in patients with asthma Exacerbation of heart failure by beta-blockers, some calcium channel antagonists (verapamil, diltiazem), NSAIDs
Dizziness	Vasodilators, e.g. nitrates, alpha-blockers, angiotensin-converting enzyme (ACE) inhibitors and angiotensin II receptor antagonists
Angina	Aggravated by thyroxine or drug-induced anaemia, e.g. aspirin or NSAIDs
Oedema	Steroids, NSAIDs, some calcium channel antagonists, e.g. nifedipine, amlodipine
Palpitation	Tachycardia and/or arrhythmia from thyroxine, β_2 stimulants, e.g. salbutamol, digoxin toxicity, hypokalaemia from diuretics, tricyclic antidepressants

NSAIDs, non-steroidal anti-inflammatory drugs.

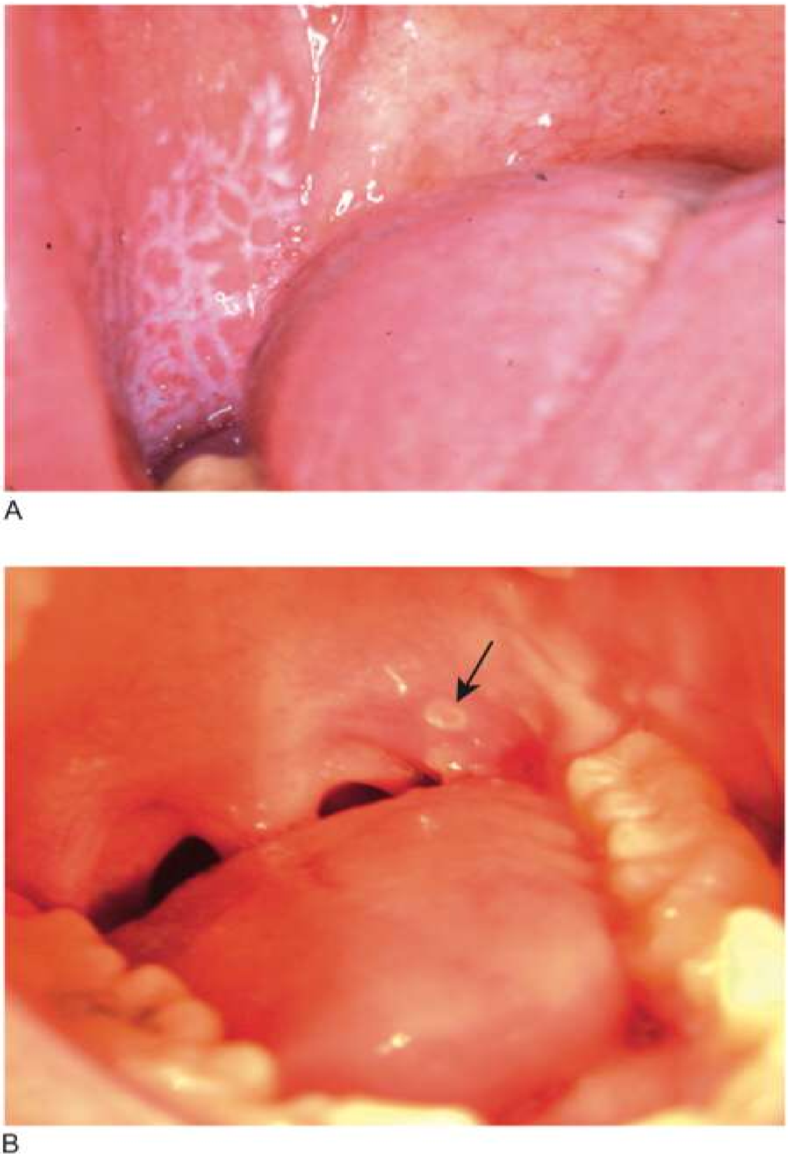
6.8 Causes of unilateral and bilateral leg oedema

Unilateral

- Deep vein thrombosis
- Soft-tissue infection
- Trauma
- Immobility, e.g. hemiplegia
- Lymphoedema

Bilateral

- Heart failure
- Chronic venous insufficiency
- Hypoproteinaemia, e.g. nephrotic syndrome, kwashiorkor, cirrhosis
- Lymphatic obstruction, e.g. pelvic tumour, filariasis
- Drugs, e.g. NSAIDs, nifedipine, amlodipine, fludrocortisone
- Inferior vena caval obstruction
- Thiamine (vitamin B_1) deficiency (wet beriberi)
- Milroy's disease (unexplained lymphoedema which appears at puberty; more common in females)
- Immobility



Small punched-out Aphthous ulcer

There are many causes of sore lips, tongue or buccal mucosa, including iron, folate, vitamin B12 or vitamin C deficiencies, dermatological disorders

Fig. 8.4 Some causes of a painful mouth. (A) Lichen planus. **(B)** Small, 'punched-out' aphthous ulcer (arrow).

Abdominal distension due to ascites

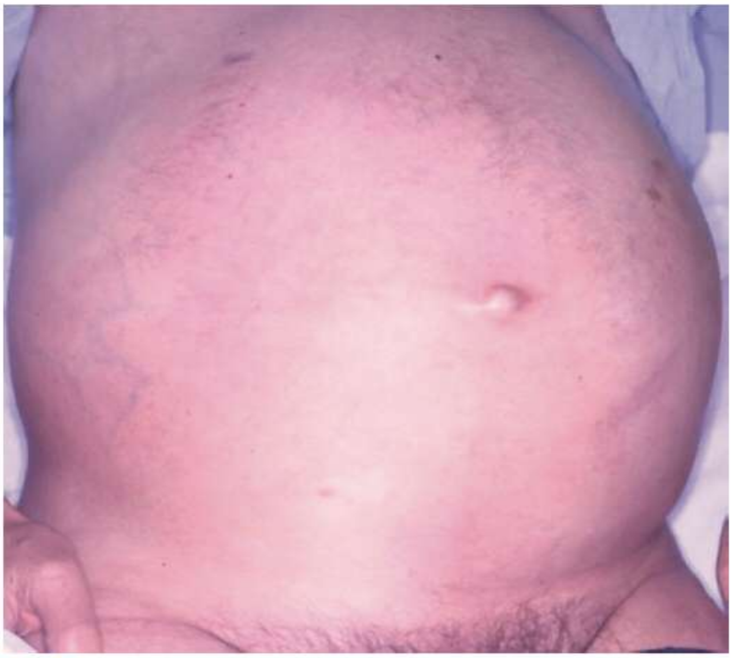
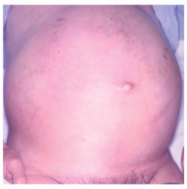


Fig. 8.7 Abdominal distension due to ascites.

Abdominal distension due to ascites

Causes of Abdominal distension
1) Fat → Obesity
2) Flatus → Pseudo-obstruction, obstruction
3) Faeces → Subacute obstruction, constipation
4) Fluid → Ascites, tumors (especially ovarian), distended bladder
5) Fetus → Check date of the last menstrual period
6) Functional → Bloating, often associated with irritable bowel syndrome

Causes of ascites
1) Hepatic cirrhosis with portal Hypertension
2) Intra-abdominal malignancy with peritoneal spread
3) Hepatic vein occlusion
4) Constrictive pericarditis
5) Hypoproteinemia
6) Tuberculosis peritonitis
7) Pancreatitis



Common causes of jaundice

1) Increased bilirubin production Hemolysis

2) Impaired bilirubin excretion

A) Congenital ⍰ Gilbert’s syndrome

B) Hepatocellular ⍰ Viral hepatitis, Cirrhosis, Drugs and Autoimmune hepatitis

C) Intrahepatic cholestasis ⍰ Drugs and Primary biliary cirrhosis

D) Extrahepatic cholestasis ⍰ Gallstones and Cancer (pancreas, cholangiocarcinoma)

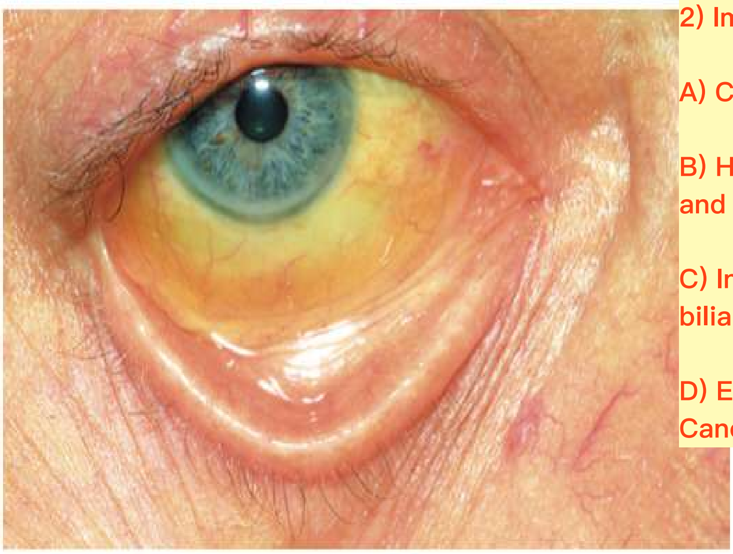


Fig. 8.8 Yellow sclera of jaundice.

Yellow sclera of jaundice

Common causes of jaundice
1) Increased bilirubin production → Hemolysis
2) Impaired bilirubin excretion
A) Congenital → Gilbert’s syndrome
B) Hepatocellular → Viral hepatitis, Cirrhosis, Drugs and Autoimmune hepatitis
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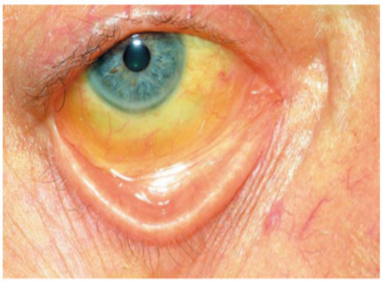
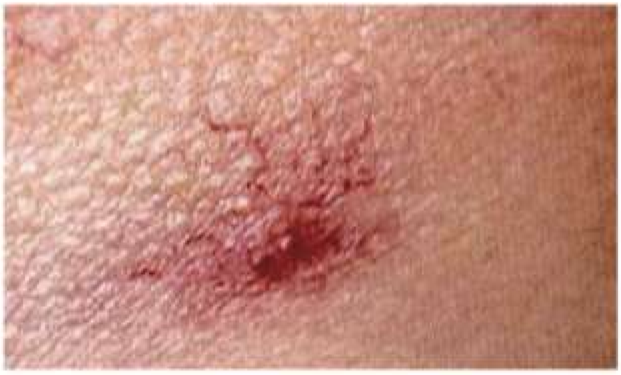
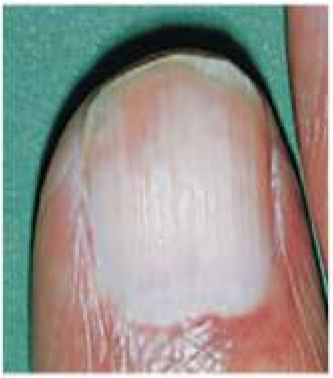


Yellow sclera of jaundice

Spider naevi (chronic liver disease)


A Spider naevi

Spider naevi are due to excess estrogen as sociated with reduced hepatic breakdown of sex steroids, also it isolated telangiectasia that characteristically fill from a central feeding vessel found in the distribution of the superior vena cava on the upper trunk, arms and face

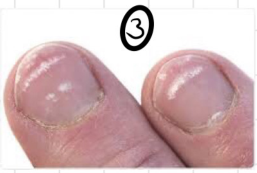

C Leukonychia

✓③. Leukonychia (Muehrcke's Lines). (white, narrow not depressed).

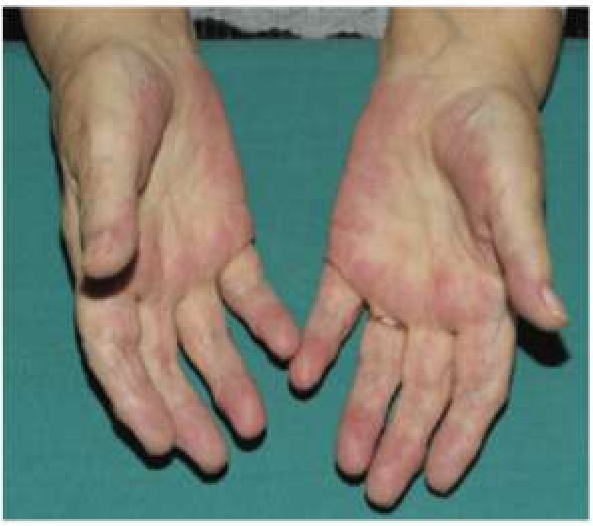
سببها ↳ - Hypealbominemia -

سببها ↳ - malnutrition

- Malapsorption يأكل وماكو امتصاص
- Renal failure اكل وامتص وطلع
- Liver cirrosis



Palmar erythema (chronic liver disease)


B Palmar erythema

Palmar erythema are due to excess estrogen associated with reduced hepatic breakdown of sex steroids

Right inguinal hernia

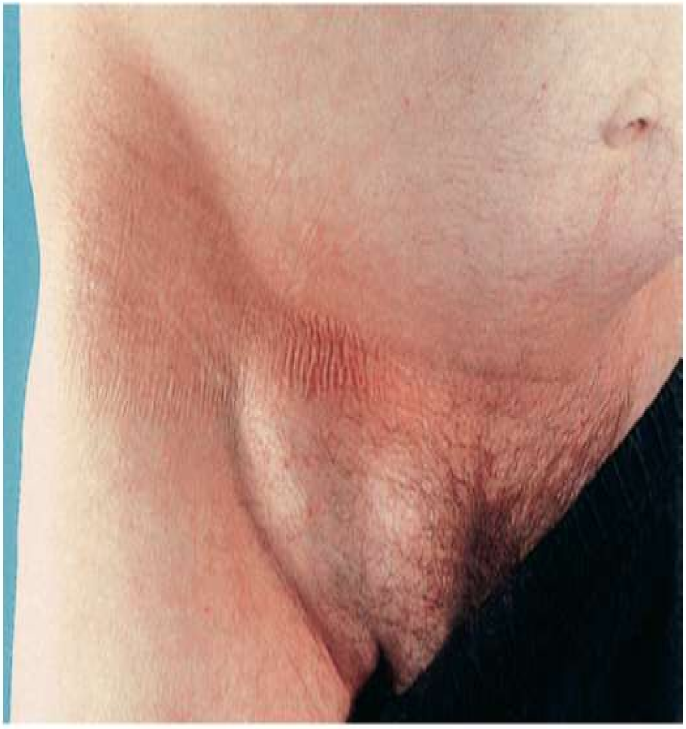


Fig. 8.22 Right inguinal hernia.

A direct inguinal hernia forms at a site of muscle weakness in the posterior wall of the inguinal canal and rarely extends into the scrotum. It is more common in older men and women

Acute pancreatitis ⍰ Bruising over the flanks (Grey–Turner's sign) or Bruising round the umbilicus (Cullen's sign)

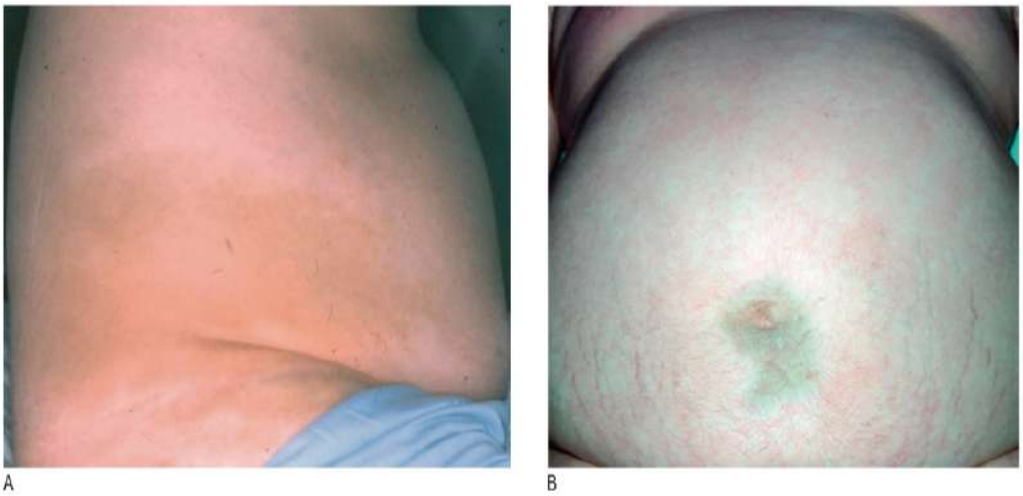


Fig. 8.28 Acute pancreatitis. (A) Bruising over the flanks (Grey–Turner's sign). (B) Bruising round the umbilicus (Cullen's sign).

p

Associated with 1) Hemorrhagic pancreatitis

2) Aortic rupture

3) Ruptured ectopic pregnancy

Bleeding into the falciform ligament; bruising develops around the

umbilicus (Cullen) or in the loins (Grey–Turner) Clinical features ⍰ Anorexia, nausea, vomiting, constant severe epigastric pain, previous alcohol abuse cholelithiasis

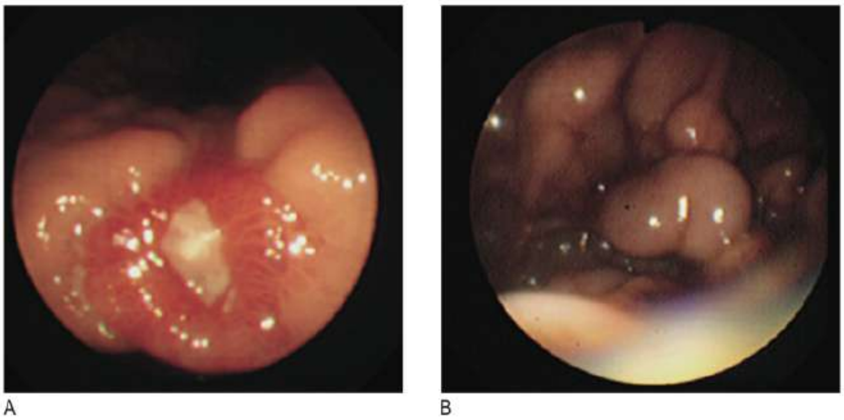

A B

Fig. 8.31 **Gastrointestinal endoscopy.** **(A)** Gastric ulcer. **(B)** Gastric varices.

EBE 8.29 Chronic liver disease

In a jaundiced patient, finding spider naevi, palmar erythema and ascites all strongly suggests chronic liver disease rather than obstructive jaundice.

O'Connor KW, Snodgrass PJ, Swonder JE et al. A blinded prospective study comparing four current non-invasive approaches in the differential diagnosis of medical versus surgical jaundice. Gastroenterology 1983;84:1498–1504.